Journal of Crystal Growth 128 (1993) 1297–1310
North-Holland

JOURNAL OF CRYSTAL GROWTH

# Author index


Abell, J.S., see Lin 128 (1993) 747
Abell, J.S., see Drake 128 (1993) 762
Adamski, J.A., see Bliss 128 (1993) 451
Aggarwal, M.D., W.S. Wang and M. Tambwe, Czochralski and modified Bridgman–Stockbarger growth of pure, $Cd^{2+}$ and $Nd^{3+}$ doped benzil single crystals 128 (1993) 891
Aguiló, see Ruiz 128 (1993) 1273
Aindow, M., see Drake 128 (1993) 762
Ainger, F.W., see Erdei 128 (1993) 1025
Akasaki, I., H. Amano, H. Murakami, M. Sassa, H. Kato and K. Manabe, Growth of GaN and AlGaN for UV/blue p–n junction diodes 128 (1993) 379
Akasaki, I., see Detchprohm 128 (1993) 384
Akasaki, I., see Watanabe 128 (1993) 391
Akasaki, I., see Yanagase 128 (1993) 562
Albers, C., see Zimmermann 128 (1993) 593
Albrecht, M., H.P. Strunk, P.O. Hansson and E. Bauser, Misfit dislocation formation and interaction in Ge(Si) on Si(001) 128 (1993) 327
Allegretti, F., A. Carrara and S. Pizzini, Growth and characterization of ZnSe for low temperature calorimetry applications 128 (1993) 646
Amano, H., see Akasaki 128 (1993) 379
Amano, H., see Detchprohm 128 (1993) 384
Amano, H., see Watanabe 128 (1993) 391
Anderson, A.C., see Fahey 128 (1993) 672
Appleby Woods, M.R., see Glass 128 (1993) 617
Arai, H., see Kimura 128 (1993) 282
Arai, K., see Shimizu 128 (1993) 793
Arivuoli, D., see Ganesha 128 (1993) 1081
Arizmendi, L., see Martinez-Lopez 128 (1993) 852
Armas, B., see Santiso 128 (1993) 363
Armington, A., see Larkin 128 (1993) 871
Asakawa, K., see Hayakawa 128 (1993) 159
Assmus, W., see Schmidbauer 128 (1993) 240
Azoulay, M., A. Raizman, R. Weingarten, H. Shacham and H. Feldstein, The growth of a cubic, single phase, $Cd_{0.6}Mn_{0.4}Te$ single crystal by the vertical gradient freeze method 128 (1993) 588
Azouni, M.A., see Yemmou 128 (1993) 1130

Bach, H., see Bonfigt 128 (1993) 725
Bach, H., see Proschmann 128 (1993) 1172
Baros, Y., see Watanabe 128 (1993) 288
Barrett, D.L., J.P. McHugh, H.M. Hobgood, R.H. Hopkins, P.G. McMullin, R.C. Clarke and W.J. Choyke, Growth of large SiC single crystals 128 (1993) 358
Barz, B., see Neubert 128 (1993) 604
Bathey, B.R., see Rajendran 128 (1993) 338
Baumann, I., P. Rudolph, D. Krabe and R. Schalge, Orthoscopic investigation of the axial optical and compositional homogeneity of Czochralski grown $LiNbO_3$ crystals 128 (1993) 903
Bauser, E., see Albrecht 128 (1993) 327
Beatty, K., see Jackson 128 (1993) 127
Belt, R.F. and J.B. Ings, Hydrothermal growth of potassium titanyl arsenate (KTA) in large autoclaves 128 (1993) 956
Belt, R.F., see Randles 128 (1993) 1016
Ben-Amar, G., see Horowitz 128 (1993) 824
Bender, H., see Lin 128 (1993) 747
Bennema, P., see Liu 128 (1993) 69
Bennema, P., Structure of crystal mother phase interface and crystal growth mechanisms 128 (1993) 97
Bennema, P., see Wang 128 (1993) 744
Bente, K., see Steins 128 (1993) 772
Benz, K.W., see Bischopink 128 (1993) 466
Benz, K.W., see Bischopink 128 (1993) 470
Benz, K.W., see Meyer 128 (1993) 475
Benz, K.W., see Zimmermann 128 (1993) 593
Beregi, E., see Hartmann 128 (1993) 74
Berends, E.M., O.S.L. Bruinsma and G.M. van Rosmalen, Nucleation and growth of fine crystals from supercritical carbon dioxide 128 (1993) 50
Berkstresser, G.W., A.J. Valentino and C.D. Brandle, Congruent composition for growth of lanthanum aluminate 128 (1993) 684
Biao, Y., see Burger 128 (1993) 1047
Bickmann, K., see Fischer 128 (1993) 846
Biderman, S., see Horowitz 128 (1993) 824
Biefeld, R.M., The growth of InSb using alternative organometallic Sb sources 128 (1993) 511
Bilurkar, P.G., see Ogale 128 (1993) 714
Biscans, B., see Frances 128 (1993) 1268
Bischopink, G. and K.W. Benz, Growth of $Al_xGa_{1-x}Sb$ and GaSb bulk crystals with liquid phase electro-epitaxy (LPEE) 128 (1993) 466
Bischopink, G. and K.W. Benz, THM growth of $Al_xGa_{1-x}Sb$ bulk crystals 128 (1993) 470

Bischopink, G., see Meyer 128 (1993) 475
Bliss, D.F., R.M. Hilton and J.A. Adamski, MLEK crystal growth of large diameter (100) indium phosphide 128 (1993) 451
Bocelli, G., see Leccabue 128 (1993) 859
Bodor, B., see Halász 128 (1993) 1212
Bonfigt, O., H. Somnitz, K. Westerholt and H. Bach, Crystal growth, characterization and physical properties of $Bi_2Sr_2CaCu_2O_{8+x}$ 128 (1993) 725
Boothroyd, A., see Changkang 128 (1993) 767
Borshchevsky, A. and J.-P. Fleurial, Growth of heavily-doped SiGe from metallic solutions 128 (1993) 331
Boyn, R., see Zimmermann 128 (1993) 593
Brandle, C.D., see Berkstresser 128 (1993) 684
Brandle, C.D., see Fratello 128 (1993) 1006
Březina, B., see Hulliger 128 (1993) 886
Brück, E., R.K. Route, R.J. Raymakers and R.S. Feigelson, Crystal growth of compounds in the $MgO–Nb_2O_5$ binary system 128 (1993) 842
Brück, E., R.J. Raymakers, R.K. Route and R.S. Feigelson, Surface stability of lithium triborate crystals grown from excess $B_2O_3$ solutions 128 (1993) 933
Bruinsma, O.S.L., see Berends 128 (1993) 50
Bruynseraede, Y., see Wang 128 (1993) 744
Buehnerkemper, M.L., see Glass 128 (1993) 617
Burger, A., S.H. Morgan, D.O. Henderson, Y. Biao, K. Zhang, E. Silberman, D. Nason, L. van den Berg, C. Ortale-Baccash and E.Cross, Processing $\alpha$-mercuric iodide by zone refining 128 (1993) 1047
Burrows, R.W., see Ciszek 128 (1993) 314
Byszewski, P., see Pajączkowska 128 (1993) 694

Caballero, M.A., see Martinez-Lopez 128 (1993) 852
Cabré, R., see Ruiz 128 (1993) 1273
Cabrera, E., see Riveros 128 (1993) 44
Calestani, G., see Leccabue 128 (1993) 859
Carrara, A., see Allegretti 128 (1993) 646
Casagrande, L.G., D. Di Marzio, M.B. Lee, D.J. Larson, Jr., M. Dudley and T. Fanning, Vertical Bridgman growth and characterization of large-diameter single-crystal CdTe 128 (1993) 576
Cassanho, A., see Sengupta 128 (1993) 709
Cassanho, A., B. Keimer and M. Greven, Growth of large pure, doped and co-doped $La_2CuO_4$ single crystals 128 (1993) 813
Casses, P., see Yemmou 128 (1993) 1130
Cernik, R.J., see Craig 128 (1993) 1263
Cestone, V.C., see DeSisto 128 (1993) 777
Chait, A., see Pines 128 (1993) 247
Chaminade, J.P., A. Garcia, J.C. Vial and R.M. Macfarlane, $CaClF:Sm^{2+}$ crystal growth and spectroscopy 128 (1993) 1031
Chang, L., see Han 128 (1993) 798
Chang, Y.S., see You 128 (1993) 527
Chang, Y.S., see Shea 128 (1993) 533
Changkang, Chen, see Wanklyn 128 (1993) 738
Changkang, Chen, Hu Yongle, B.M. Wanklyn, S. Hazell, A.K. Pradhan, J.W. Hodby, A. Boothroyd and F.R. Wondre, The phase diagram and crystal growth of $(Y_{1-x}Pr_x)Ba_2Cu_3O_{7-x}$ 128 (1993) 767
Chartier, I., see Ferrand 128 (1993) 966
Chen Changkang, see Changkang 128 (1993) 738
Chen Changkang, see Changkang 128 (1993) 767
Chen, F., see Kaito 128 (1993) 267
Chen, H.C., D.L. Sun, Y.Y. Song and Q.Z. Jiang, Growth and properties of a new TB type photorefractive crystal 128 (1993) 880
Chen, H.S., see Kortan 128 (1993) 1086
Chen, N., see Jenkins 128 (1993) 375
Chen, T.P., see You 128 (1993) 527
Chen, T.P., see Shea 128 (1993) 533
Cherenkov, A., see Dmitriev 128 (1993) 343
Cherepanova, T.A. and A.V. Stekolnikov, Computer simulation of molecular liquids on corrugated crystal surfaces 128 (1993) 116
Choyke, W.J., see Barrett 128 (1993) 358
Ciszek, T.F., T.H. Wang, R.W. Burrows and X. Wu, Growth of thin crystalline silicon layers for photovoltaic device use 128 (1993) 314
Clarke, R.C., see Barrett 128 (1993) 358
Clemans, J.E., see Jordan 128 (1993) 444
Collongues, R., A.M. Lejus, J. Théry and D. Vivien, Crystal growth and characterization of new laser materials 128 (1993) 986
Comas, J., see Steiner 128 (1993) 543
Combescure, C., see Santiso 128 (1993) 363
Cormier, J.E., see Larkin 128 (1993) 871
Cot, L., see Gómez-Morales 128 (1993) 1250
Craig, S.R., K.J. Roberts, J.N. Sherwood, K. Sato, Y. Hayashi, M. Iwahashi and R.J. Cernik, Using in-situ synthrotron radiation powder diffraction to characterize growth-related structural polymorphic phase transformations in cis-9-$\omega$-octadecenoic acid 128 (1993) 1263
Creamer, J.E., see Randles 128 (1993) 1016
Cross, E., see Burger 128 (1993) 1047

Dabkowska, H., A. Dabkowski and J.E. Greedan, Flux growth of single crystals of $Nd_yPr_{1-y}GaO_3$ solid solutions as substrates for high temperature superconductor films 128 (1993) 699
Dabkowski, A., see Dabkowska 128 (1993) 699
De Groot, P.A.J., see Wanklyn 128 (1993) 738
Debnam, W., see Rosch 128 (1993) 1187
Demaree, J.D., see Sengupta 128 (1993) 817
DeMattei, R.C., see Pong 128 (1993) 650

DeMattei, R.C. and R.S. Feigelson, The effect of forced convection on the melt gradient and growth rate during the Bridgman and gradient freeze crystal growth of silver-doped lead bromide 128 (1993) 1062
DeMattei, R.C. and R.S. Feigelson, Thermal methods for crystallizing biological macromolecules 128 (1993) 1225
Deng, J.R., see You 128 (1993) 527
Deng, J.R., see Shea 128 (1993) 533
Deng Mengxiang, and Yang Xiuzhen, $Bi_6Te_2Mo_2O_{21}$ – a new synthetic crystal and its physical properties 128 (1993) 876
Deng, Peizhen, see Hu 128 (1993) 991
Derby, J.J., see Xiao 128 (1993) 188
DeSisto, W.J., R.L. Henry, H.S. Newman, M.S. Osofsky and V.C. Cestone, Metal-organic chemical vapor deposition of $YBa_2Cu_3O_{7-\delta}$ on $SrTiO_3$ and $LaAlO_3$ 128 (1993) 777
Detchprohm, T., H. Amano, K. Hiramatsu and I. Akasaki, The growth of thick GaN film on sapphire substrate by using ZnO buffer layer 128 (1993) 384
Di Marzio, D., see Casagrande 128 (1993) 576
Díaz, F., see Ruiz 128 (1993) 1273
DiCarolis, S.A., see Hiskes 128 (1993) 781
DiCarolis, S.A., see Lu 128 (1993) 788
Dieguez, E., see Wanklyn 128 (1993) 738
Dieguez, E., see Martinez-Lopez 128 (1993) 852
Dmitriev, V. and A. Cherenkov, Growth of SiC and SiC–AlN solid solution by container-free liquid phase epitaxy 128 (1993) 343
Dmitriev, V., see Jenkins 128 (1993) 375
Dobbyn, R.G., see Steiner 128 (1993) 543
Docherty, R., see Fagan 128 (1993) 1257
Drake, A., M. Aindow, M. Rand and J.S. Abell, Microscopic studies of YBCO single crystals 128 (1993) 762
Drechsler, M., see Meyer 128 (1993) 567
Dubs, C., see Görnert 128 (1993) 751
Dudley, M., see Casagrande 128 (1993) 576
Dudley, M., see Su 128 (1993) 627
Durand, J., see Gómez-Morales 128 (1993) 1250
Duval, W.M.B., see Singh 128 (1993) 1053

Eguchi, M., see Watanabe 128 (1993) 288
Eiche, C., see Zimmermann 128 (1993) 593
Eidelman, L.G., V.I. Goriletsky, V.G. Protsenko, A.V. Radkevich and V.V. Trofimenko, Automated pulling from the melt – an effective method for growing large alkali halide single crystals for optical and scintillation applications 128 (1993) 1059
Einav, Y., see Horowitz 128 (1993) 824
Ekawa, M., see Ferid 128 (1993) 613
Endo, S., see Matsushita 128 (1993) 655
Erdei, S. and F.W. Ainger, Crystal growth of $YVO_4$ using the LHPG technique 128 (1993) 1025

Fagan, P.G., K.J. Roberts and R. Docherty, The crystallization of highly perfect metal-free phthalocyanine powders for "ab-initio" structure solution by diffraction methods 128 (1993) 1257
Fahey, R.E., A.J. Strauss and A.C. Anderson, Vertical gradient-freeze growth of aluminate crystals 128 (1993) 672
Fanning, T., see Casagrande 128 (1993) 576
Faschinger, W., P. Juza, S. Ferreira, H. Zajicek, A. Pesek, H. Sitter and K. Lischka, Self-limiting monolayer epitaxy (SME): a new approach to the growth of wide gap II–VI heterostructures 128 (1993) 622
Feigelson, R.S., see Pong 128 (1993) 650
Feigelson, R.S., see Hiskes 128 (1993) 781
Feigelson, R.S., see Lu 128 (1993) 788
Feigelson, R.S., see Brück 128 (1993) 842
Feigelson, R.S., see Brück 128 (1993) 933
Feigelson, R.S., see DeMattei 128 (1993) 1062
Feigelson, R.S., see DeMattei 128 (1993) 1225
Feldstein, H., see Azoulay 128 (1993) 588
Ferid, T., M. Ekawa, K. Yasuda, A. Tanaka and M. Saji, Variation of surface morphology with precursor supply ratio in MOVPE CdTe layers 128 (1993) 613
Ferrand, B., D. Pelenc, I. Chartier and Ch. Wyon, Growth by LPE of Nd:YAG single crystal layers for waveguide laser applications 128 (1993) 966
Ferreira, S., see Faschinger 128 (1993) 622
Figueras, A., see Veintemillas-Verdaguer 128 (1993) 349
Figueras, A., see Santiso 128 (1993) 363
Fiorani, D., see Leccabue 128 (1993) 859
Fischer, K., see Görnert 128 (1993) 751
Fischer, K.J., U. Köbler, B. Stroka, K. Bickmann and H. Wenzl, Growth of EuO crystals by a solution sintering process 128 (1993) 846
Fleurial, J.-P., see Borshchevsky 128 (1993) 331
Frances, C., B. Biscans, N. Gabas and C. Laguérie, Investigations of the effects of some additives on the crystallization of tetrahydrate sodium perborate 128 (1993) 1268
Fratello, V.J. and C.D. Brandle, Physical properties of a $Y_3Al_5O_{12}$ melt 128 (1993) 1006
Fripp, A., see Rosch 128 (1993) 1187
Fritsch, E. and J.E. Shigley, The separation of natural from synthetic gem-quality diamonds on the basis of crystal growth criteria 128 (1993) 425
Fu, C.M., see Wang 128 (1993) 744
Fujii, M., H. Iwanaga, M. Ichihara and S. Takeuchi, Structure of tetrapod-like ZnO crystals 128 (1993) 1095
Fujioka, J., see Riveros 128 (1993) 44
Fujiwara, H., see Fujiwara 128 (1993) 275
Fujiwara, T., S. Inami, S. Miyahara, S. Kobayashi, T. Kubo and H. Fujiwara,

Study of characteristics of the crystal temperature in a Czochralski puller through experiment and simulation 128 (1993) 275
Fukuda, T., see Hirata 128 (1993) 195
Fukuda, T., see Suzuki 128 (1993) 435
Fukuda, T., see Machida 128 (1993) 829
Fukuda, T., see Kan 128 (1993) 915
Fukuda, T., see Shimamura 128 (1993) 1021
Furukawa, Y. and W. Shimada, Three-dimensional pattern formation during growth of ice dendrites – its relation to universal law of dendritic growth 128 (1993) 234
Furukawa, Y., M. Sato, K. Kitamura and F. Nitanda, Growth and characterization of off-congruent $LiNbO_3$ single crystals grown by the double crucible method 128 (1993) 909
Furukawa, Y., see Yamamoto 128 (1993) 920
Furukawa, Y. and I. Ishikawa, Direct evidence for melting transition at interface between ice crystal and glass substrate 128 (1993) 1137
Fusegawa, I., H. Yamagishi, T. Mori, H. Takayama, E. Iino and K. Takano, Characterization of interstitial oxygen striations in silicon single crystals 128 (1993) 293

Gabas, N. and C. Laguérie, Predictions with UNIFAC of liquid–solid phase diagrams: application to water–sucrose–glucose, water–sucrose–fructose and water–xylose–mannose 128 (1993) 1245
Gabas, N., see Frances 128 (1993) 1268
Gaebel, R., see Steins 128 (1993) 772
Gally, M., see Riveros 128 (1993) 44
Ganesha, R., D. Arivuoli and P. Ramasamy, Growth of some group V–VI–VII compounds from the vapour 128 (1993) 1081
Garcia, A., see Chaminade 128 (1993) 1031
García-Ruiz, J.-M. and G. Otálora, Fluid patterns in the diffusive field around a growing crystal 128 (1993) 163
Gazit, D., see Horowitz 128 (1993) 824
Gerson, A.R., K.J. Roberts, J.N. Sherwood, A.M. Taggart and G. Jackson, The role of growth environment on the crystallization of normal alkanes in the homologous series from $C_{18}H_{38}$ to $C_{29}H_{60}$ 128 (1993) 1176
Giegé, R., see Lorber 128 (1993) 1203
Gillies, D.C., see Su 128 (1993) 627
Gilmer, G.H., see Jackson 128 (1993) 127
Glass, H.L., M.R. Appleby Woods, M.L. Buehnerkemper, D.L. Varnum and T.P. Weismuller, Control of microtwins in MOCVD of CdTe on sapphire 128 (1993) 617
Göbel, R. and H. Janning, Hydride-VPE growth of InP and SI InP:Fe in $H_2/N_2$ ambient 128 (1993) 516
Gómez-Morales, J., R. Rodríguez-Clemente, J. Durand and L. Cot, Growth morphology of berlinite crystals obtained under hydrothermal conditions 128 (1993) 1250
Goriletsky, V.I., see Eidelman 128 (1993) 1059
Gorman, R.J., see Nordquist 128 (1993) 483
Görnert, P., K. Fischer and C. Dubs, On the flux growth and some properties of superconducting $YBa_2Cu_3O_{7-x}$ single crystals and LPE films 128 (1993) 751
Gottlieb, M., see Singh 128 (1993) 1053
Grasza, K. and A. Jędrzejczak, Melt dynamics in directional solidification of PbSnTe 128 (1993) 183
Grasza, K., Estimation of the optimal conditions for directional crystal growth from the vapour phase with no contact between crystal and ampoule wall 128 (1993) 609
Greedan, J.E., see Dabkowska 128 (1993) 699
Greven, M., see Cassanho 128 (1993) 813
Grey, C., see Wang 128 (1993) 744
Gu Kaihui, see Luo 128 (1993) 963
Gutmann, R., see Hulliger 128 (1993) 897

Halász, S. and B. Bodor, On the morphological and chemical stability of vitamin C crystals 128 (1993) 1212
Halfpenny, P.J., R.I. Ristić, E.E.A. Shepherd and J.N. Sherwood, The crystal growth behaviour of the organic non-linear optical material 2-(α-methylbenzylamino)-5-nitropyridine (MBANP) 128 (1993) 970
Hamabe, T., see Kitano 128 (1993) 1099
Hamacher, R.D., see Singh 128 (1993) 976
Hamano, K., see Higashi 128 (1993) 1113
Han, Jianru, Yusheng Liu, Min Wang and Dezhen Nie, Flux growth and properties of $RbTiOAsO_4$ (RTA) crystals 128 (1993) 864
Han, P.D., L. Chang and D.A. Payne, Top-seeded growth of superconducting $(Ba_{1-x}K_x)BiO_3$ crystals by an electrochemical method 128 (1993) 798
Hansson, P.O., see Albrecht 128 (1993) 327
Harris, M., see Larkin 128 (1993) 871
Hartmann, E. and E. Beregi, Face statistics on the dissolution forms of garnet crystals 128 (1993) 74
Hayakawa, Y., K. Asakawa, Y. Torimoto, K. Yamashita, A. Nakayama and M. Kumagawa, Influence of the solute convection on InGaSb LPE layers on vertically mounted GaSb substrates 128 (1993) 159
Hayashi, Y., see Craig 128 (1993) 1263
Hazell, S., see Changkang 128 (1993) 767
Henderson, D.O., see Burger 128 (1993) 1047
Hendriksen, B.A., see MacCalman 128 (1993) 1218
Henningsen, T., see Singh 128 (1993) 976
Henry, R.L., see Nordquist 128 (1993) 483

Henry, R.L., see DeSisto 128 (1993) 777
Heremans, C. and B.J. Wuensch, Growth of single crystals of fast-ion conducting binary and ternary copper and silver halides for neutron scattering 128 (1993) 1069
Hibiya, T., see Watanabe 128 (1993) 288
Higashi, I., M. Kobayashi, S. Okada, K. Hamano and T. Lundström, Boron-rich crystals in Al–M–B (M = Li, Be, Mg) systems grown from high-temperature aluminum solutions 128 (1993) 1113
Higashi, I., see Okada 128 (1993) 1120
Higashino, T., Y. Inatomi and K. Kuribayashi, In-situ observation of unidirectional solidification in transparent organic alloy 128 (1993) 178
Hilton, R.M., see Bliss 128 (1993) 451
Hirabayashi, Y., S. Karasawa and K. Kobayashi, Epitaxial growth of cubic SiC by hot filament CVD 128 (1993) 369
Hirai, K., see Moriya 128 (1993) 304
Hirai, K., see Karasawa 128 (1993) 403
Hiramatsu, K., see Detchprohm 128 (1993) 384
Hiramatsu, K., see Watanabe 128 (1993) 391
Hiramatsu, K., see Yanagase 128 (1993) 562
Hiraoka, Y.S., M. Mashita, T. Tada and R. Yoshimura, Ab initio molecular orbital study on the reaction of TMA with $H_2$ 128 (1993) 494
Hirata, A., M. Tachibana, Y. Okano and T. Fukuda, Observation of crystal–melt interface shape in simulated Czochralski method with model fluid 128 (1993) 195
Hirosawa, K., see Watanabe 128 (1993) 391
Hiskes, R., S.A. DiCarolis, R.D. Jacowitz, Z. Lu, R.S. Feigelson, R.K. Route and J.L. Young, Single source MOCVD of epitaxial oxide thin films 128 (1993) 781
Hiskes, R., see Lu 128 (1993) 788
Hobgood, H.M., see Barrett 128 (1993) 358
Hodby, J.M., see Wanklyn 128 (1993) 738
Hodby, J.W., see Changkang 128 (1993) 767
Hoffmann, D.M., see Zimmermann 128 (1993) 593
Hofmann, D., T. Jung and G. Müller, Growth of 2 inch Ge:Ga crystals by the dynamical vertical gradient freeze process and its numerical modelling including transient segregation 128 (1993) 213
Hopkins, F.K., see Singh 128 (1993) 976
Hopkins, R.H., see Barrett 128 (1993) 358
Hopkins, R.H., see Singh 128 (1993) 976
Horiguchi, K., see Karasawa 128 (1993) 403
Horowitz, A., S. Biderman, D. Gazit, Y. Einav, G. Ben-Amar and M. Weiss, The growth of dome-shaped sapphire crystals by the gradient solidification method (GSM) 128 (1993) 824
Hoshikawa, K., see Suzuki 128 (1993) 435
Hoshikawa, K., see Machida 128 (1993) 829
Hoshikawa, K., see Kan 128 (1993) 915
Hoshikawa, K., see Shimamura 128 (1993) 1021
Hu, Bing, Hongbi Zhu, Peizhen Deng and Peicong Pan, Growth and perfection of chromium-doped forsterite 128 (1993) 991
Hu, X., see Kudoh 128 (1993) 1162
Hu Yongle, see Yongle 128 (1993) 738
Hu Yongle, see Yongle 128 (1993) 767
Huang, Tao, Shan Liu, Yong Yang, Deyang Lu and Yaohe Zhou, Coupling of Couette flow and crystal morphologies in directional freezing 128 (1993) 167
Huang, X.H., see Li 128 (1993) 1092
Huang, Y., see Sun 128 (1993) 867
Huinink, J., see Van der Eerden 128 (1993) 57
Hulliger, J., K. Sutter, Y. Schumacher, B. Březina and V.A. Ivanshin, Growth of a first organic photorefractive crystal 128 (1993) 886
Hulliger, J., R. Gutmann and H. Wüest, Growth of large size $KNbO_3$ crystals and epitaxial layers of $KTa_{1-x}Nb_xO_3$ 128 (1993) 897
Hurle, D.T.J., Dynamics, stability and control of Czochralski growth 128 (1993) 15

Ichihara, M., see Fujii 128 (1993) 1095
Iino, E., see Fusegawa 128 (1993) 293
Imagawa, H., see Katsumata 128 (1993) 924
Imai, K., M. Koike, H. Sawa and H. Takei, Growth and crystal structure of $LiCuO_2$ 128 (1993) 808
Imoto, S., see Kouta 128 (1993) 938
Inada, T., see Shibata 128 (1993) 439
Inami, S., see Fujiwara 128 (1993) 275
Inaoka, K., see Yamanaka 128 (1993) 113
Inatomi, Y., see Higashino 128 (1993) 178
Inatomi, Y. and K. Kuribayashi, In-situ observation of morphological change on LPE grown surface in semiconductors 128 (1993) 557
Ings, J.B., see Belt 128 (1993) 956
Irie, T., see Matsushita 128 (1993) 655
Irvine, K.G., see Jenkins 128 (1993) 375
Ishikawa, I., see Furukawa 128 (1993) 1137
Ishimaru, M., S. Matsumura, N. Kuwano and K. Oki, Monte Carlo simulation of $L1_1$-type ordering due to surface step migration in the epitaxial growth of III–V semiconductor alloys 128 (1993) 499
Ishizawa, Y., see Kamimura 128 (1993) 429
Itoh, K., see Yasuda 128 (1993) 319
Ivanshin, V.A., see Hulliger 128 (1993) 886
Iwahashi, M., see Craig 128 (1993) 1263
Iwanaga, H., see Fujii 128 (1993) 1095
Iyi, N., see Yamamoto 128 (1993) 920
Izmailov, A.F., see Myerson 128 (1993) 139
Izumi, T., Y. Nakamura and Y. Shiohara, Crystal growth mechanism of $YBa_2$

$Cu_3O_y$ superconductors with peritectic reaction 128 (1993) 757

Jackson, G., see Gerson 128 (1993) 1176
Jackson, K.A., G.H. Gilmer, D.E. Temkin, J.D. Weinberg and K. Beatty, Non-equilibrium phase transformations 128 (1993) 127
Jacobs, K., see Neubert 128 (1993) 604
Jacowitz, R.D., see Hiskes 128 (1993) 781
Jacowitz, R.D., see Lu 128 (1993) 788
Janning, H., see Göbel 128 (1993) 516
Jansen, J.C. and G.M. van Rosmalen, Oriented growth of silica molecular sieve crystals as supported films 128 (1993) 1150
Jędrzejczak, A., see Grasza 128 (1993) 183
Jenkins, I., K.G. Irvine, M.G. Spencer, V. Dmitriev and N. Chen, Growth of solid solutions of aluminum nitride and silicon carbide by metalorganic chemical vapor deposition 128 (1993) 375
Jenssen, H.P., see Sengupta 128 (1993) 709
Jesser, W., see Rosch 128 (1993) 1187
Jiang, Q.Z., see Chen 128 (1993) 880
Jin, D.J., see Li 128 (1993) 1092
Jordan, A.S., E.M. Monberg and J.E. Clemans, Thermal stress theory of dislocation reduction in the vertical gradient freeze (VGF) growth of GaAs and InP 128 (1993) 444
Jordan, A.S. and A. Robertson, Equilibrium gas-phase composition and thermodynamic properties including subhydrides in the pyrolysis of $AsH_3$ and $PH_3$ 128 (1993) 488
Juan, C.Y., see You 128 (1993) 527
Jung, T., see Hofmann 128 (1993) 213
Juza, P., see Faschinger 128 (1993) 622

Kaito, C., T. Watanabe, K. Ohtsuka, F. Chen and Y. Saito, A new experimental study on the production of clusters from copper ultrafine particles 128 (1993) 267
Kaito, C., see Saito 128 (1993) 271
Kakimoto, K., see Watanabe 128 (1993) 288
Kaldis, E., see Pietchotka 128 (1993) 1040
Kalejs, J.P., Point defect, carbon and oxygen complexing in polycrystalline silicon 128 (1993) 298
Kalejs, J.P., see Rajendran 128 (1993) 338
Kamata, A., see Parbrook 128 (1993) 639
Kamimura, Y., T. Tanaka, S. Otani, Y. Ishizawa, Z.U. Rek and J. Wong, Floating zone growth of monochromator grade crystals of $YB_{66}$ 128 (1993) 429
Kamotani, Y., see Zhang 128 (1993) 1288
Kan, S., M. Sakamoto, Y. Okano, K. Hoshikawa and T. Fukuda, $LiNbO_3$ single crystal growth from Li-rich melts by the continuous charging and double crucible Czochralski methods 128 (1993) 915
Kanai, H., S. Motoyama, M. Kimura, A. Tanaka and T. Sukegawa, Gravity effect on liquid phase epitaxy of Si 128 (1993) 310
Kaneko, T., Growth kinetics of vapor-grown SiC 128 (1993) 354
Kano, K., see Katsumata 128 (1993) 924
Kao, J.Y., see You 128 (1993) 527
Kao, J.Y., see Shea 128 (1993) 533
Karasawa, S., see Hirabayashi 128 (1993) 369
Karasawa, S., M. Mitsuhashi, S. Ohya, K. Kobayashi, T. Watanabe, K. Hirai, K. Horiguchi and F. Togashi, Crystal growth of epitaxial CVD diamond using $^{13}C$ isotope and characterization of dislocations by Raman spectroscopy 128 (1993) 403
Karasawa, S., see Kobayashi 128 (1993) 408
Karasawa, S., see Togashi 128 (1993) 418
Kato, H., see Akasaki 128 (1993) 379
Kato, T., see Kuriyama 128 (1993) 1125
Katsumata, T., H. Konoura, H. Imagawa, A. Konno, K. Takei, M. Shinohara, K. Kano and K. Takahashi, Growth and characterization of $Li_2B_4O_7$ single crystals grown by novel Bridgman technique using a graphite container 128 (1993) 924
Kawada, H., S. Shirayone and K. Takahashi, Reduction of surface defects in GaAs layers grown by MBE 128 (1993) 550
Kawai, T., see Matsubara 128 (1993) 719
Kawata, M., H. Toshima, Y. Miyazawa and S. Morita, Growth of gadolinium indium gallium garnel (GInGG) single crystal by the floating zone method 128 (1993) 1011
Kawazoe, Y., see Kudoh 128 (1993) 1162
Keimer, B., see Cassanho 128 (1993) 813
Khaneev, N.P., see Osiko 128 (1993) 1193
Kiessling, F.M. and H.S. Leipner, TEM investigation of precipitates in $Hg_{0.8}Cd_{0.2}Te$ grown by the travelling heater method 128 (1993) 599
Kiessling, F.M., see Neubert 128 (1993) 604
Kihn, Y., see Santiso 128 (1993) 363
Kimura, M., H. Arai, T. Mori and H. Yamagishi, Facet formation in silicon single crystals grown by VMFZ method 128 (1993) 282
Kimura, M., see Kanai 128 (1993) 310
Kimura, S., see Yamamoto 128 (1993) 920
Kitamura, K., see Furukawa 128 (1993) 909
Kitamura, K., see Yamamoto 128 (1993) 920
Kitano, M., T. Hamabe, S. Maeda and T. Okabe, Morphology and growth mechanism of new-shaped ZnO crystals 128 (1993) 1099
Klavins, P., see Zhang 128 (1993) 734
Klavins, P., see Mosley 128 (1993) 804
Knops, H.J.F., see Van der Eerden 128 (1993) 57
Kobashi, M., see Tanaka 128 (1993) 680
Kobayashi, K., see Hirabayashi 128 (1993) 369

Kobayashi, K., see Karasawa 128 (1993) 403
Kobayashi, K., M. Kumagai, S. Karasawa, T. Watanabe and F. Togashi, Effect of ion implantation and surface structure of silicon on diamond film nucleation 128 (1993) 408
Kobyashi, K., see Togashi 128 (1993) 418
Kobayashi, M., see Higashi 128 (1993) 1113
Kobayashi, S., see Fujiwara 128 (1993) 275
Köbler, U., see Fischer 128 (1993) 846
Koide, Y., see Yasuda 128 (1993) 319
Koike, M., see Imai 128 (1993) 808
Kojima, H., see Tanaka 128 (1993) 680
Kolesnikova, E.N., see Yuferev 128 (1993) 144
Konno, A., see Katsumata 128 (1993) 924
Konoura, H., see Katsumata 128 (1993) 924
Kopylov, N., see Kortan 128 (1993) 1086
Kortan, A.R., F.A. Thiel, N. Kopylov and H.S. Chen, Growth of perfect quasicrystals, from curiosity to reality 128 (1993) 1086
Kosik, W.E., see Sengupta 128 (1993) 817
Kouta, H., S. Imoto and Y. Kuwano, $\beta$-$BaB_2O_4$ single crystal growth by Czochralski method using $\alpha$-$BaB_2O_4$ and $\beta$-$BaB_2O_4$ single crystals as starting material 128 (1993) 938
Krabe, D., see Baumann 128 (1993) 903
Krämer, V., see Treser 128 (1993) 664
Krebs, H.-U., see Steins 128 (1993) 772
Kubo, T., see Fujiwara 128 (1993) 275
Kudoh, M., X. Hu, K. Ohno and Y. Kawazoe, New cluster–cluster aggregation model for formation process of fractal structure in sol–gel transition of $SiO_2$ 128 (1993) 1162
Kuduo, K., see Okada 128 (1993) 1120
Kuma, S., see Shibata 128 (1993) 439
Kumagai, M., see Kobayashi 128 (1993) 408
Kumagawa, M., see Hayakawa 128 (1993) 159
Kuribayashi, K., see Higashino 128 (1993) 178
Kuribayashi, K., see Inatomi 128 (1993) 557
Kuriyama, K., Y. Takahashi and T.Kato, Preparation and characterization of the filled tetrahedral semiconductor LiZnP film on InP(111) 128 (1993) 1125
Kusaka, I., see Nishioka 128 (1993) 1157
Kuwano, N., see Ishimaru 128 (1993) 499
Kuwano, Y., see Kouta 128 (1993) 938
Kway, W.L., B. Rupp and J.B. Tassano, Characterization of the LiSr(Al,Cr)$F_6$ solid solution for Cr-laser applications 128 (1993) 1036

Laasch, M., see Mühlberg 128 (1993) 571
Laguérie, C., see Gabas 128 (1993) 1245
Laguérie, C., see Frances 128 (1993) 1268
Lan, M.D., see Zhang 128 (1993) 734
Langenbach, M., see Schilz 128 (1993) 1197
Laor, U., see Steiner 128 (1993) 543
Larkin, J., M. Harris, J.E. Cormier and A. Armington, Hydrothermal growth of bismuth silicate (BSO) 128 (1993) 871
Larrousse, M., see Zhou 128 (1993) 173
Larrousse, M., see Rajendran 128 (1993) 338
Larson, Jr., D.J., see Casagrande 128 (1993) 576
Leccabue, F., B.E. Watts, C. Pelosi, D. Fiorani, A.M. Testa, A. Pajączkowka, G. Bocelli and G. Calestani, CVT growth and characterization of $Zn_{1-x}Mn_xCr_2O_4$ single crystals 128 (1993) 859
Lee, M.B., see Casagrande 128 (1993) 576
Lee, Y.P., see Mosley 128 (1993) 804
Lehoczky, S.L., see Su 128 (1993) 627
Leipner, H.S., see Kiessling 128 (1993) 599
Lejus, A.M., see Collongues 128 (1993) 986
Li, Qiang, Y.L. Zhang, R.Z. Yuan, X.H. Huang and D.J. Jin, Growth of $Tb_{0.27}Dy_{0.73}Fe_2$ magnetostrictive single crystals 128 (1993) 1092
Liang, B.W. and C.W. Tu, A study of group-V element desorption from InAs, InP, GaAs and GaP by reflection high-energy electron diffraction 128 (1993) 538
Liang, W.Y., see Lin 128 (1993) 747
Lin, C. and S. Motakef, Modelling of directional solidification of BSO 128 (1993) 834
Lin, C.T., E. Schönherr, H. Bender, W.Y. Liang and J.S. Abell, Phase separation during solution growth of $YBa_2Cu_3O_{7-\delta}$ single crystals using a pulling technique 128 (1993) 747
Linke, H., see Meyer 128 (1993) 567
Lischka, K., see Faschinger 128 (1993) 622
Liu, J.Z., see Zhang 128 (1993) 734
Liu, J.Z., see Mosley 128 (1993) 804
Liu, Shan, see Huang 128 (1993) 167
Liu, X.-Y. and P. Bennema, Kinetic roughening in relation to the roughening transition in odd-numbered alkane crystals 128 (1993) 69
Liu, Yusheng, see Han 128 (1993) 864
Lorber, B., M. Skouri, J.-P. Munch and R. Giegé, The influence of impurities on protein crystallization; the case of lysozyme 128 (1993) 1203
Lovergine, N., D. Manno, A.M. Mancini and L. Vasanelli, Surface structural and morphological characterization of ZnTe epilayers grown on {100}GaAs by MOVPE 128 (1993) 633
Lu, Deyang, see Huang 128 (1993) 167
Lu, Z., see Hiskes 128 (1993) 781
Lu, Z., R.S. Feigelson, R.K. Route, S.A. DiCarolis, R. Hiskes and R.D. Jacowitz, Solid source MOCVD for the epitaxial growth of thin oxide films 128 (1993) 788
Lundström, T., see Higashi 128 (1993) 1113
Lundström, T., see Okada 128 (1993) 1120

Luo Chuhua, Gu Kaihui, Zhai Ning, Zheng Chongzhong, Xie Quixiang and Luo Fei, Growth of $KTiOAsO_4$ (KTA) and $CsTiOAsO_4$ (CTA) crystals from new molten salt system 128 (1993) 963
Luo Fei, see Luo 128 (1993) 963

MacCalman, M.L., K.J. Roberts and B.A. Hendriksen, The influence of growth environment on the crystallization of nortriptyline hydrochloride, a tricyclic antidepressant 128 (1993) 1218
Macfarlane, R.M., see Chaminade 128 (1993) 1031
Machida, H., K. Hoshikawa and T. Fukuda, Growth of $TiO_2$ ribbon single crystals by edge-defined film-fed growth method 128 (1993) 829
Maeda, S., see Kitano 128 (1993) 1099
Malkin, A.J. and A. McPherson, Light scattering investigations of protein and virus crystal growth: ferritin, apoferritin and satellite tobacco mosaic virus 128 (1993) 1232
Manabe, K., see Akasaki 128 (1993) 379
Mancini, A.M., see Lovergine 128 (1993) 633
Manente, R.A., see Melcher 128 (1993) 1001
Manno, D., see Lovergine 128 (1993) 633
Martinez-Lopez, J., M.A. Caballero, M.T. Santos, L. Arizmendi and E. Dieguez, Solid–liquid interface in the growth of sillenite-type crystals 128 (1993) 852
Maruyama, S., Formation of secondary twins in thin films 128 (1993) 1104
Mashita, M., see Hiraoka 128 (1993) 494
Mate, N., see Ogale 128 (1993) 714
Matsubara, I., H. Yamashita and T. Kawai, Growth of superconducting whiskers in the Bi system 128 (1993) 719
Matsumura, S., see Ishimaru 128 (1993) 499
Matsushita, A., see Mosley 128 (1993) 804
Matsushita, H., S. Endo, T. Irie and H. Nakanishi, Crystal growth of $CuInSe_2$ by the method of horizontal Bridgman with two temperature zones 128 (1993) 655
Mattheis, F., see Steins 128 (1993) 772
Mazel, A., see Santiso 128 (1993) 363
Mazelsky, R., see Singh 128 (1993) 976
Mazelsky, R., see Singh 128 (1993) 1053
McHugh, J.P., see Barrett 128 (1993) 358
McMullin, P.G., see Barrett 128 (1993) 358
McPherson, A., see Malkin 128 (1993) 1232
Melcher, C.L., R.A. Manente, C.A. Peterson and J.S. Schweitzer, Czochralski growth of rare earth oxyorthosilicate single crystals 128 (1993) 1001
Meyer, B.K., G. Bischopink, K.W. Benz, A. Schöner and G. Pensl, Optical and electrical characterization of $Al_xGa_{1-x}Sb$ crystals grown by the travelling heater method 128 (1993) 475
Meyer, B.K., C. Wetzel, M. Drechsler, A. Moll, H. Linke, P. Omling and F. Scholz, Novel applications of contactless characterization techniques in epitaxial crystals and quantum well structures 128 (1993) 567
Meyer, B.K., see Zimmermann 128 (1993) 593
Mimura, K., see Yamanaka 128 (1993) 113
Ming, Nai-ben, Defect mechanisms of crystal growth and their kinetics 128 (1993) 104
Mitsuhashi, M., see Karasawa 128 (1993) 403
Mitsuhashi, M., see Togashi 128 (1993) 418
Miyahara, S., see Fujiwara 128 (1993) 275
Miyamoto, A., see Sasaki 128 (1993) 950
Miyazawa, S., M. Sasaura and M. Mukaida, Single crystal growth of rare-earth gallates and epitactic growth nature of high-$T_c$ superconducting YBCO thin films on them 128 (1993) 704
Miyazawa, Y., H. Toshima and S. Morita, The growth of $NdAlO_3$ single crystals by Czochralski method 128 (1993) 668
Miyazawa, Y., see Sekiwa 128 (1993) 689
Miyazawa, Y., see Kawata 128 (1993) 1011
Möck, P., Complete characterization of epitaxial systems from the lattice geometrical point of view. I. Fundamentals 128 (1993) 122
Mogi, I., S. Okubo and Y. Nakagawa, Effect of high magnetic fields on fractal growth of lead metal-leaves 128 (1993) 258
Moll, A., see Meyer 128 (1993) 567
Monberg, E.M., see Jordan 128 (1993) 444
Monfort, J.P. and A. Nzihou, Light scattering kinetics study of cyclopropane hydrate growth 128 (1993) 1182
Moravec, F., Growth and characterization of GaSb single crystals 128 (1993) 457
Morgan, S.H., see Burger 128 (1993) 1047
Mori, A., see Nishioka 128 (1993) 1157
Mori, T., see Kimura 128 (1993) 282
Mori, T., see Fusegawa 128 (1993) 293
Morita, S., see Miyazawa 128 (1993) 668
Morita, S., see Sekiwa 128 (1993) 689
Morita, S., see Kawata 128 (1993) 1011
Moriya, K., H. Wada and K. Hirai, Development of non-destructive bulk micro-defect analyzer for Si wafers 128 (1993) 304
Mosley, W.D., J.Z. Liu, A. Matsushita, Y.P. Lee, P. Klavins and R.N. Shelton, Preparation and superconductivity of $Ba_{1-x}K_xBiO_3$ single crystals 128 (1993) 804
Motakef, S., see Lin 128 (1993) 834
Motoyama, S., see Kanai 128 (1993) 310
Mühlberg, M., P. Rudolph, M. Laasch and E. Treser, The correlation between su-

perheating and supercooling in CdTe melts during unseeded Bridgman growth 128 (1993) 571
Mühlberg, M., see Rudolph 128 (1993) 582
Mukaida, M., see Miyazawa 128 (1993) 704
Müller, G., Convective instabilities in melt growth configurations 128 (1993) 26
Müller, G., see Ostrogorsky 128 (1993) 201
Müller, G., see Ostrogorsky 128 (1993) 207
Müller, G., see Hofmann 128 (1993) 213
Munch, J.-P., see Lorber 128 (1993) 1203
Murakami, H., see Akasaki 128 (1993) 379
Myerson, A.S. and A.F. Izmailov, Nucleation in non-critical binary systems 128 (1993) 139

Nakagawa, Y., see Mogi 128 (1993) 258
Nakai, S., see Sasaki 128 (1993) 950
Nakamura, Y., see Izumi 128 (1993) 757
Nakanishi, H., see Matsushita 128 (1993) 655
Nakayama, A., see Hayakawa 128 (1993) 159
Narayanan, S., see Raina 128 (1993) 729
Nason, D., see Burger 128 (1993) 1047
Nawathey-Dikshit, R., see Ogale 128 (1993) 929
Neubert, M., see Rudolph 128 (1993) 582
Neubert, M., F.M. Kiessling, B. Barz and K. Jacobs, Hg vacancy diffusion in mercury cadmium telluride 128 (1993) 604
Newman, H.S., see DeSisto 128 (1993) 777
Nicoară, D., see Nicoară 128 (1993) 152
Nicoară, I., D. Nicoară and D. Vizman, Heat transfer analysis and structure perfection of shaped semi-transparent crystals 128 (1993) 152
Nie, Dezhen, see Han 128 (1993) 864
Nikolov, V., see Ruiz 128 (1993) 1273
Nishinaga T. and T. Suzuki, Towards understanding the growth mechanism of III–V semiconductors on an atomic scale 128 (1993) 37
Nishinaga, T., see Uen 128 (1993) 521
Nishioka, K., I. Kusaka and A. Mori, Interfacial thermodynamics of noncritical clusters and homogeneous nucleation in multicomponent systems 128 (1993) 1157
Nitanda, F., see Furukawa 128 (1993) 909
Nobe, Y., see Yamaguchi 128 (1993) 996
Nomura, S. and T. Takizawa, Method of selenizing liquid Cu–In alloy in growing $CuInSe_2$ single crystals 128 (1993) 659
Nonaka, H., see Shimizu 128 (1993) 793
Nordquist, P.E.R., R.L. Henry and R.J. Gorman, Sequential etching of GaAs 128 (1993) 483
Nzihou, A., see Monfort 128 (1993) 1182

Obara, K., Microscopic condensation processes of niobium microclusters in sputtering 128 (1993) 262
Obara, K., Pressure dependence of prototype structures of metastable niobium oxides 128 (1993) 1166
Ogale, S.B., P.G. Bilurkar, N. Mate, N. Parikh and B. Patnaik, Deposition of epitaxial $Cu_2O$ films on (100) MgO by laser ablation and their processing using ion beams 128 (1993) 714
Ogale, S.B. and R. Nawathey-Dikshit, Deposition of $LiNbO_3$ thin films on *c*-axis oriented epitaxial $Y_1Ba_2Cu_3O_{7-\delta}$ films by pulsed excimer laser ablation 128 (1993) 929
Ogawa, H. and Y. Waseda, Molecular dynamics study on the liquid structures of $BaB_2O_4$ just after melting 128 (1993) 945
Ohno, K., see Kudoh 128 (1993) 1162
Ohshima, N., see Yasuda 128 (1993) 319
Ohtsuka, K., see Kaito 128 (1993) 267
Ohtsuka, K., see Saito 128 (1993) 271
Ohya, S., see Karasawa 128 (1993) 403
Ohya, S., see Togashi 128 (1993) 418
Okabe, T., see Kitano 128 (1993) 1099
Okada, S., see Higashi 128 (1993) 1113
Okada, S., K. Kudou, I. Higashi and T. Lundström, Single crystals of TaB, $Ta_5B_6$, $Ta_3B_4$ and $TaB_2$, as obtained from high-temperature metal solutions, and their properties 128 (1993) 1120
Okano, Y., see Hirata 128 (1993) 195
Okano, Y., see Suzuki 128 (1993) 435
Okano, Y., see Kan 128 (1993) 915
Oki, K., see Ishimaru 128 (1993) 499
Okubo, S., see Mogi 128 (1993) 258
Omling, P., see Meyer 128 (1993) 567
Ortale-Baccash, C., see Burger 128 (1993) 1047
Osiko, V.V., D.L. Penyaz and N.P. Khaneev, Study of directional crystallization process in a cold container with direct radio-frequency heating 128 (1993) 1193
Osofsky, M.S., see DeSisto 128 (1993) 777
Ostrach, S., see Zhang 128 (1993) 1288
Ostrogorsky, A.G., H.J. Sell, S. Scharl and G. Müller, Convection and segregation during growth of Ge and InSb crystals by the submerged heater method 128 (1993) 201
Ostrogorsky, A.G. and G. Müller, Model of the effective segregation coefficient applied to low-convection solidification in microgravity 128 (1993) 207
Otálora, G., see García-Ruiz 128 (1993) 163
Otani, S., see Kamimura 128 (1993) 429

Pajączkowska, A. and P. Byszewski, Anomalies in crystal growth by Czochralski technique 128 (1993) 694
Pajączkowka, A., see Leccabue 128 (1993) 859
Pan, Peicong, see Hu 128 (1993) 991
Pandey, R.K., see Raina 128 (1993) 729
Parbrook, P.J., A. Kamata and T. Uemoto, The growth and characterization of cad-

mium selenide and cadmium zinc selenide epilayers by MOVPE 128 (1993) 639
Parikh, N., see Ogale 128 (1993) 714
Patnaik, B., see Ogale 128 (1993) 714
Payne, D.A., see Han 128 (1993) 798
Payne, D.A., see Sun 128 (1993) 867
Pelenc, D., see Ferrand 128 (1993) 966
Pelosi, C., see Leccabue 128 (1993) 859
Pendergrass, T.K., see Rosch 128 (1993) 1187
Pensl, G., see Meyer 128 (1993) 475
Penyaz, D.L., see Osiko 128 (1993) 1193
Pesek, A., see Faschinger 128 (1993) 622
Peterson, C.A., see Melcher 128 (1993) 1001
Pétré, G., see Yemmou 128 (1993) 1130
Piechotka, M., G. Wetzel, A. Rossberg, H.-J. Schwer, M. Zha and E. Kaldis, Recent advances in bulk crystal growth from the vapour: the case of $\alpha$-$HgI_2$ 128 (1993) 1040
Pines, V., M. Zlatkowski and A. Chait, Surface tension anisotropy and cell-like structure formation in free solidification 128 (1993) 247
Pizzini, S., see Allegretti 128 (1993) 646
Pong, C., R.S. Feigelson and R.C. DeMattei, Epitaxial growth of high quality ZnSe and ZnSe/ZnS superlattices for optical processing 128 (1993) 650
Pradhan, A.K., see Wanklyn 128 (1993) 738
Pradhan, A.K., see Changkang 128 (1993) 767
Price, C.J., Characterizing the effect of growth conditions and crystal habit on the distribution of imperfections amongst populations of crystals 128 (1993) 1277
Proschmann, J., Th. Strangfeld and H. Bach, Separation in metallic melts 128 (1993) 1172
Protsenko, V.G., see Eidelman 128 (1993) 1059

Radkevich, A.V., see Eidelman 128 (1993) 1059
Raina, K.K., S. Narayanan and R.K. Pandey, Phase analysis of Bi–Ca–Sr–Cu–O superconducting films at different growth temperatures from KCl supercooled solutions 128 (1993) 729
Raizman, A., see Azoulay 128 (1993) 588
Rajan, K., see Steiner 128 (1993) 543
Rajendran, S., M. Larrousse, B.R. Bathey and J.P. Kalejs, Silicon carbide control in the EFG system 128 (1993) 338
Raju, K.S. and B.M. Wanklyn, Characterization of modified pyrochlores $CsMFeF_6$ (M = Mn, Co and Zn) 128 (1993) 1078
Ramasamy, P., see Ganesha 128 (1993) 1081
Rand, M., see Drake 128 (1993) 762
Randles, M.H., J.E. Creamer and R.F. Belt, Disordered oxide crystal hosts for diode pumped lasers 128 (1993) 1016
Raymakers, R.J., see Brück 128 (1993) 842
Raymakers, R.J., see Brück 128 (1993) 933
Regel, L.L., see Zhou 128 (1993) 173
Rek, Z.U., see Kamimura 128 (1993) 429
Ristić, R.I., see Halfpenny 128 (1993) 970
Riveros, H., E. Cabrera, M. Gally, C. Ruiz-Mejia and J. Fujioka, Models for the early stages of nucleation 128 (1993) 44
Roberts, K.J., see Gerson 128 (1993) 1176
Roberts, K.J., see MacCalman 128 (1993) 1218
Roberts, K.J., see Craig 128 (1993) 1263
Roberts, K.J., see Fagan 128 (1993) 1257
Robertson, A., see Jordan 128 (1993) 488
Rodríguez-Clemente, R., see Veintemillas-Verdaguer 128 (1993) 349
Rodríguez-Clemente, R., see Santiso 128 (1993) 363
Rodríguez-Clemente, R., see Gómez-Morales 128 (1993) 1250
Rodríguez-Clemente, R., see Veintemillas-Verdaguer 128 (1993) 1282
Rosch, W., W. Jesser, W. Debnam, A. Fripp, G. Woodell and T.K. Pendergrass, A technique for measuring the heat transfer coefficient inside a Bridgman furnace 128 (1993) 1187
Rossberg, A., see Piechotka 128 (1993) 1040
Route, R.K., see Hiskes 128 (1993) 781
Route, R.K., see Lu 128 (1993) 788
Route, R.K., see Brück 128 (1993) 842
Route, R.K., see Brück 128 (1993) 933
Rudolph, P., see Mühlberg 128 (1993) 571
Rudolph, P., M. Neubert and M Mühlberg, Defects in CdTe Bridgman monocrystals caused by nonstoichiometric growth conditions 128 (1993) 582
Rudolph, P., see Baumann 128 (1993) 903
Ruiz-Mejia, C., see Riveros 128 (1993) 44
Ruiz, X., V. Nikolov, F. Sandiumenge, R. Solé, R. Cabré, M. Aguiló and F. Díaz, Solvents for the growth of $BaFe_{12-(x+y)}Co_xSn_yO_{10}$ bulk crystals from high-temperature solution 128 (1993) 1273
Rupp, B., see Kway 128 (1993) 1036

Saito, Y., T. Sakiyama and M. Uwaha, Growth morphologies in diffusion fields 128 (1993) 82
Saito, Y., see Uwaha 128 (1993) 87
Saito, Y. and T. Sakiyama, Kinetic effect on 2D dendritic growth 128 (1993) 224
Saito, Y., see Kaito 128 (1993) 267
Saito, Y., K. Ohtsuka, T. Watanabe and C. Kaito, Structure of oxide particles produced by the reaction between Mg ultrafine particle and SiO film 128 (1993) 271
Saji, M., see Ferid 128 (1993) 613
Sakamoto, M., see Kan 128 (1993) 915
Sakiyama, T., see Saito 128 (1993) 82
Sakiyama, T., see Saito 128 (1993) 224
Sandiumenge, F., see Ruiz 128 (1993) 1273

Sangwal, K., Effect of impurities on the processes of crystal growth 128 (1993) 1236
Santiso, J., A. Figueras, R. Rodrígeuz-Clemente, B. Armas, C. Combescure, A. Mazel, Y. Kihn and J. Sévely, MOCVD SiC layer morphology and texture dependence on thickness and total pressure 128 (1993) 363
Santos, M.T., see Martinez-Lopez 128 (1993) 852
Sasaki, T., A. Miyamoto, A. Yokotani and S. Nakai, Growth and optical characterization of large potassium titanyl phosphate crystals 128 (1993) 950
Sasaki, T., see Shimamura 128 (1993) 1021
Sasaura, M., see Miyazawa 128 (1993) 704
Sassa, M., see Akasaki 128 (1993) 379
Sato, A., see Wada 128 (1993) 1109
Sato, K., see Yamanaka 128 (1993) 113
Sato, K., see Craig 128 (1993) 1263
Sato, M., see Furukawa 128 (1993) 909
Sato, M., see Yamamoto 128 (1993) 920
Sawa, H., see Imai 128 (1993) 808
Schalge, R., see Baumann 128 (1993) 903
Scharl, S., see Ostrogorsky 128 (1993) 201
Schilz, J. and M. Langenbach, Powder metallurgy of Ge, Si, and Ge–Si 128 (1993) 1197
Schmidbauer, W., T. Wilke and W. Assmus, In-situ observation of growth morphologies in systems with high melting temperatures 128 (1993) 240
Scholz, F., see Meyer 128 (1993) 567
Schöner, A., see Meyer 128 (1993) 475
Schönherr, E., see Lin 128 (1993) 747
Schreurs, L.W.M., see Wang 128 (1993) 744
Schumacher, Y., see Hulliger 128 (1993) 886
Schweitzer, J.S., see Melcher 128 (1993) 1001
Schwer, H.-J., see Piechotka 128 (1993) 1040
Sekerka, R.F., Role of instabilities in determination of the shapes of growing crystals 128 (1993) 1
Sekiwa, H., S. Morita and Y. Miyazawa, The growth of $DyAlO_3$ single crystals by Czochralski method 128 (1993) 689
Sell, H.J., see Ostrogorsky 128 (1993) 201
Sengupta, L.C., S. Sengupta, W.E. Kosik and J.D. Demaree, Surface analysis of $Ln_{2-x}Ce_xCuO_4$ (Ln = Pr and Nd) single crystals grown by the top seeded solution method 128 (1993) 817
Sengupta, S., A. Cassanho and H.P. Jenssen, Investigation of the growth of neighborite, $NaMgF_3$ 128 (1993) 709
Sengupta, S., see Sengupta 128 (1993) 817
Sévely, J., see Santiso 128 (1993) 363
Shacham, H., see Azoulay 128 (1993) 588
Shea, J.S., see You 128 (1993) 527
Shea, J.S., B.T. You, J.Y. Kao, J.R. Deng, Y.S. Chang and T.P. Chen, Large area epitaxial method for high brightness 655 nm AlGaAs double heterostructure red LEDs 128 (1993) 533
Shelton, R.N., see Zhang 128 (1993) 734
Shelton, R.N., see Mosley 128 (1993) 804
Shepherd, E.E.A., see Halfpenny 128 (1993) 970
Sherwood, J.N., see Halfpenny 128 (1993) 970
Sherwood, J.N. and G.S. Simpson, The growth, structural and optical characterization of large area, single crystalline thin films of 3-nitroaniline (mNA) 128 (1993) 981
Sherwood, J.N., see Gerson 128 (1993) 1176
Sherwood, J.N., see Craig 128 (1993) 1263
Shibata, M., T. Suzuki, S. Kuma and T. Inada, LEC growth of large GaAs single crystals 128 (1993) 439
Shigley, J.E., see Fritsch 128 (1993) 425
Shimada, W., see Furukawa 128 (1993) 234
Shimamura, K., M. Timoshechkin, T. Sasaki, K. Hoshikawa and T. Fukuda, Growth and characterization of calcium niobium gallium garnet (CNGG) single crystals for laser applications 128 (1993) 1021
Shimizu, T., H. Nonaka and K. Arai, Thin film growth behavior of $YBa_2Cu_3O_{7-\delta}$ in sequential deposition with high-purity ozone gas 128 (1993) 793
Shinohara, M., see Katsumata 128 (1993) 924
Shiohara, Y., see Izumi 128 (1993) 757
Shirayone, S., see Kawada 128 (1993) 550
Silberman, E., see Burger 128 (1993) 1047
Simpson, G.S., see Sherwood 128 (1993) 981
Sinerius, D., see Zimmermann 128 (1993) 593
Singh, N.B., T. Henningsen, R.H. Hopkins, R. Mazelsky, R.D. Hamacher, E.P. Supertzi, F.K. Hopkins, D.E. Zelmon and O.P. Singh, Nonlinear optical characteristics of binary organic system 128 (1993) 976
Singh, N.B., M. Gottlieb, R. Mazelsky and W.M.B. Duval, The optical quality of mercurous halide crystals 128 (1993) 1053
Singh, O.P., see Singh 128 (1993) 976
Sitter, H., see Faschinger 128 (1993) 622
Skouri, M., see Lorber 128 (1993) 1203
Smith, D., see Wanklyn 128 (1993) 738
Solé, R., see Ruiz 128 (1993) 1273
Somnitz, H., see Bonfigt 128 (1993) 725
Song, Y.Y., see Chen 128 (1993) 880
Spencer, M.G., see Jenkins 128 (1993) 375
Stefanova, L.A., see Yuferev 128 (1993) 144
Steiner, B., W. Tseng, J. Comas, U. Laor, R.G. Dobbyn and K. Rajan, Defect formation in semiconductor layers during epitaxial growth 128 (1993) 543
Steins, M., F. Mattheis, R. Gaebel, K. Bente and H.-U. Krebs, X-ray characterization of laser ablated textured $YBa_2Cu_3O_{7-x}$

thin films on Si, Zr, MgO and $SrTiO_3$ substrates 128 (1993) 772
Stekolnikov, A.V., see Cherepanova 128 (1993) 116
Strangfeld, Th., see Proschmann 128 (1993) 1172
Strauss, A.J., see Fahey 128 (1993) 672
Stringfellow, G.B., Novel precursors for organometallic vapor phase epitaxy 128 (1993) 503
Stroka, B., see Fischer 128 (1993) 846
Strunk, H.P., see Albrecht 128 (1993) 327
Su, C.-H., M.P. Volz, D.C. Gillies, F.R. Szofran, S.L. Lehoczky, M. Dudley, G.-D. Yao and W. Zhou, Growth of ZnTe by physical vapor transport and traveling heater method 128 (1993) 627
Sukegawa, T., see Kanai 128 (1993) 310
Sukegawa, T., see Watanabe 128 (1993) 462
Sukegawa, T., see Watabe 128 (1993) 479
Sun, B.N., Y. Huang and D.A. Payne, Growth of large $PbTiO_3$ crystals by a self-flux technique 128 (1993) 867
Sun, D.L., see Chen 128 (1993) 880
Sunagawa, I., Crystal growth in the Mineral Kingdom 128 (1993) 397
Supertzi, E.P., see Singh 128 (1993) 976
Sutter, K., see Hulliger 128 (1993) 886
Suzuki, T., see Nishinaga 128 (1993) 37
Suzuki, T., Y. Okano, K. Hoshikawa and T. Fukuda, Heat transfer during GaAs growth of bulk single crystal by the liquid encapsulated vertical Bridgman technique 128 (1993) 435
Suzuki, T., see Shibata 128 (1993) 439
Szofran, F.R., see Su 128 (1993) 627

Tachibana, M., see Hirata 128 (1993) 195
Tada, T., see Hiraoka 128 (1993) 494
Tadatomo, K., see Watabe 128 (1993) 479
Taggart, A.M., see Gerson 128 (1993) 1176
Takahashi, K., see Kawada 128 (1993) 550
Takahashi, K., see Katsumata 128 (1993) 924
Takahashi, Y., see Kuriyama 128 (1993) 1125
Takano, K., see Fusegawa 128 (1993) 293
Takayama, H., see Fusegawa 128 (1993) 293
Takei, H., see Imai 128 (1993) 808
Takei, K., see Katsumata 128 (1993) 924
Takeuchi, S., see Fujii 128 (1993) 1095
Takeuchi, T., see Watanabe 128 (1993) 391
Takizawa, T., see Nomura 128 (1993) 659
Tambwe, M., see Aggarwal 128 (1993) 891
Tanaka, A., see Kanai 128 (1993) 310
Tanaka, A., see Watanabe 128 (1993) 462
Tanaka, A., see Watabe 128 (1993) 479
Tanaka, A., see Ferid 128 (1993) 613
Tanaka, I., M. Kobashi and H. Kojima, Single crystal growth of pure and Y-substituted $NdAlO_3$ by the floating zone (FZ) method 128 (1993) 680
Tanaka, S., see Yanagase 128 (1993) 562
Tanaka, T., see Kamimura 128 (1993) 429
Tassano, J.B., see Kway 128 (1993) 1036
Temkin, D.E., see Jackson 128 (1993) 127
Testa, A.M., see Leccabue 128 (1993) 859
Théry, J., see Colongues 128 (1993) 986
Thiel, F.A., see Kortan 128 (1993) 1086
Timoshechkin, M., see Shimamura 128 (1993) 1021
Togashi, F., see Karasawa 128 (1993) 403
Togashi, F., see Kobayashi 128 (1993) 408
Togashi, F., K. Kobayashi, M. Mitsuhashi, S. Karasawa, S. Ohya and T. Watanabe, Synthesis and morphology of CVD diamond on Ta and TaC film 128 (1993) 418
Torimoto, Y., see Hayakawa 128 (1993) 159
Torrent-Burgues, J., see Veintemillas-Verdaguer 128 (1993) 1282
Toshima, H., see Miyazawa 128 (1993) 668
Toshima, H., see Kawata 128 (1993) 1011
Treser, E., see Mühlberg 128 (1993) 571
Treser, E. and V. Krämer, Crystal growth of $AgGaS_2$ by Bridgman–Stockbarger technique using shaped crucibles 128 (1993) 664
Trofimenko, V.V., see Eidelman 128 (1993) 1059
Tseng, W., see Steiner 128 (1993) 543
Tu, C.W., see Liang 128 (1993) 538
Tzeng, Y., see Wei 128 (1993) 413

Uemoto, T., see Parbrook 128 (1993) 639
Uen, W.Y. and T. Nishinaga, Growth of GaAs on Si by employing AlAs/GaAs double amorphous buffer 128 (1993) 521
Uwaha, M., see Saito 128 (1993) 82
Uwaha, M. and Y. Saito, Fluctuation of steps in a surface diffusion field 128 (1993) 87
Uwaha, M., Evolution of a train of interacting steps in a surface diffusion field 128 (1993) 92

Valentino, A.J., see Berkstresser 128 (1993) 684
Van den Berg, L., see Burger 128 (1993) 1047
Van den Berg, T.H.M., see Van der Eerden 128 (1993) 57
Van der Eerden, J.P., T.H.M. van den Berg, J. Huinink and H.J.F. Knops, Fundamental criterion for surface melting 128 (1993) 57
Van der Eerden, J.P., Relevance of surface roughening and surface melting for crystal growth 128 (1993) 62
Van der Eerden, J.P., see Van Miltenburg 128 (1993) 1143
Van der Heijden, A.E.D.M., see Van Driel 128 (1993) 229
Van der Linden, P., see Wang 128 (1993) 744
Van Driel, C.A., A.E.D.M. van der Heijden and G.M. van Rosmalen, Growth of ammonium nitrate phase I and II dendrites 128 (1993) 229
Van Miltenburg, J.C. and J.P. van der Eerden, Very large melting point depression of water in silica 128 (1993) 1143
Van Rosmalen, G.M., see Berends 128 (1993) 50

Van Rosmalen, G.M., see Van Driel 128 (1993) 229
Van Rosmalen, G.M., see Jansen 128 (1993) 1150
Varnum, D.L., see Glass 128 (1993) 617
Vasanelli, L., see Lovergine 128 (1993) 633
Vasil'ev, M.G., see Yuferev 128 (1993) 144
Veintemillas-Verdaguer, S., A. Figueras and R. Rodríguez-Clemente, A thermodynamical approach to tetramethylsilane (TMS) pyrolysis; application to SiC coatings obtained by MOCVD 128 (1993) 349
Veintemillas-Verdaguer, S., R. Rodríguez-Clemente and J. Torrent-Burgues, Lead chloride crystal growth from boiling solutions 128 (1993) 1282
Vial, J.C., see Chaminade 128 (1993) 1031
Vivien, D., see Colongues 128 (1993) 986
Vizman, D., see Nicoară 128 (1993) 152
Volz, M.P., see Su 128 (1993) 627

Wada, H., see Moriya 128 (1993) 304
Wada, H. and A. Sato, Crystal growth and properties of $Ag_{1-x}TaSe_{6-x}I_x (0 \leq x \leq 1)$ 128 (1993) 1109
Wang, Min, see Han 128 (1993) 864
Wang, T.H., see Ciszek 128 (1993) 314
Wang, W.S., see Aggarwal 128 (1993) 891
Wang Yao-Shui, P. Bennema, Zheng Manna, C.M. Fu, C. Grey, L.W.M. Schreurs, Q. Xu, P. van der Linden and Y. Brynseraede, Improvement of superconductivity in YBCO single crystals 128 (1993) 744
Wanklyn, B.M., E. Dieguez, Chen Changkang, A.K. Pradhan, J.W. Hodby, Hu Yongle, D. Smith, F. Wondre and P.A.J. de Groot, Improved thermogravimetric analysis and crystal growth of Bi–Sr–Ca–Cu–O 128 (1993) 738
Wanklyn, B.M., see Changkang 128 (1993) 767
Wanklyn, B.M., see Raju 128 (1993) 1078
Waseda, Y., see Ogawa 128 (1993) 945
Watabe, S., K. Tadatomo, T. Sukegawa and A. Tanaka, Growth of GaInP thick layers by the modified yo-yo solute feeding method 128 (1993) 479
Watanabe, A., T. Takeuchi, K. Hirosawa, H. Amano, K. Hiramatsu and I. Akasaki, The growth of single crystalline GaN on a Si substrate using AlN as an intermediate layer 128 (1993) 391
Watanabe, A., A. Tanaka and T. Sukegawa, GaSb solution growth by the solute feeding Czochralski method 128 (1993) 462
Watanabe, M., M. Eguchi, K. Kakimoto, Y. Baros and T. Hibiya, The baroclinic flow instability in rotating silicon melt 128 (1993) 288
Watanabe, T., see Kaito 128 (1993) 267
Watanabe, T., see Saito 128 (1993) 271
Watanabe, T., see Karasawa 128 (1993) 403
Watanabe, T., see Kobayashi 128 (1993) 408
Watanabe, T., see Togashi 128 (1993) 418
Watts, B.E., see Leccabue 128 (1993) 859
Wei, J. and Y. Tzeng, Growth of diamond by sequential deposition and etching process using hot filament CVD 128 (1993) 413
Weinberg, J.D., see Jackson 128 (1993) 127
Weingarten, R., see Azoulay 128 (1993) 588
Weismuller, T.P., see Glass 128 (1993) 617
Weiss, M., see Horowitz 128 (1993) 824
Wenckus, J.F., Mass production of refractory oxide crystals: cubic zirconia 128 (1993) 13
Wenzl, H., see Fischer 128 (1993) 846
Westerholt, K., see Bonfigt 128 (1993) 725
Wetzel, C., see Meyer 128 (1993) 567
Wetzel, G., see Piechotka 128 (1993) 1040
Wilcox, W.R., see Zhou 128 (1993) 173
Wilke, T., see Schmidbauer 128 (1993) 240
Wondre, F.R., see Changkang 128 (1993) 738
Wondre, F.R., see Changkang 128 (1993) 767
Wong, J., see Kamimura 128 (1993) 429
Woodell, G., see Rosch 128 (1993) 1187
Wu, X., see Ciszek 128 (1993) 314
Wuensch, B.J., see Heremans 128 (1993) 1069
Wüest, H., see Hulliger 128 (1993) 897
Wyon, Ch., see Ferrand 128 (1993) 966

Xiao, Q. and J.J. Derby, The role of internal radiation and melt convection in Czochralski oxide growth: deep interfaces, interface inversion, and spiraling 128 (1993) 188
Xie Qiuxiang, see Luo 128 (1993) 963
Xu, J.J., Uniformly valid asymptotic solution for steady dendrite growth in external flow 128 (1993) 219
Xu, Q., see Wang 128 (1993) 744

Yamagishi, H., see Kimura 128 (1993) 282
Yamagishi, H., see Fusegawa 128 (1993) 293
Yamagishi, K., see Yamaguchi 128 (1993) 996
Yamaguchi, Y., K. Yamagishi and Y. Nobe, The behavior of chromium ions in forsterite 128 (1993) 996
Yamamoto, J.K., K. Kitamura, N. Iyi, S. Kimura, Y. Furukawa and M. Sato, Growth and characterization of $Sc_2O_3$-doped $LiNbO_3$ 128 (1993) 920
Yamanaka, M., K. Mimura, K. Yase, K. Sato and K. Inaoka, Growth mechanism of long chain molecular crystals on KCl substrate due to annealing 128 (1993) 113
Yamashita, H., see Matsubara 128 (1993) 719
Yamashita, K., see Hayakawa 128 (1993) 159
Yanagase, M., S. Tanaka, K. Hiramatsu and I. Akasaki, Growth and characterization of InGaAs bulk crystals grown by liquid phase electro-epitaxy 128 (1993) 562

Yang Xiuzhen, see Deng 128 (1993) 876
Yang, Yong, see Huang 128 (1993) 167
Yao, G.-D., see Su 128 (1993) 627
Yasa, K., see Yamanaka 128 (1993) 113
Yasuda, K., see Ferid 128 (1993) 613
Yasuda, Y., K. Itoh, N. Ohshima, Y. Koide and S. Zaima, RHEED studies of initial stage of Ge film growth on (311)Si by gas source molecular beam epitaxy 128 (1993) 319
Yemmou, M., M.A. Azouni, P. Casses and G. Pétré, Thermal aspects of particle engulfment by solidifying front 128 (1993) 1130
Yokotani, A., see Sasaki 128 (1993) 950
Yokoyama, E., Formation of patterns during growth of snow crystals 128 (1993) 251
Yongle, Hu, see Wanklyn 128 (1993) 738
Yongle, Hu, see Changkang 128 (1993) 767
Yoshimura, R., see Hiraoka 128 (1993) 494
You, B.T., J.S. Shea, J.Y. Kao, J.R. Deng, Y.S. Chang, C.Y. Juan and T.P. Chen, Improvement of high brightness Al GaAs/GaAs DH red LED under optimum growth conditions 128 (1993) 527
You, B.T., see Shea 128 (1993) 533
Young, J.L., see Hiskes 128 (1993) 781
Yuan, R.Z., see Li 128 (1993) 1092
Yuferev, V.S., M.G. Vasil'ev, L.A. Stefanova and E.N. Kolesnikova, Control of radiative-conductive heat transfer in shaped semi-transparent crystals pulled from the melt 128 (1993) 144
Zaima, S., see Yasuda 128 (1993) 319
Zajicek, H., see Faschinger 128 (1993) 622
Zelmon, D.E., see Singh 128 (1993) 976
Zha, M., see Pietchotka 128 (1993) 1040
Zhai Ning, see Luo 128 (1993) 963
Zhang, H., Y. Kamotani and S. Ostrach, Growth-in-gel zeolite crystallization and transport phenomena 128 (1993) 1288
Zhang, K., see Burger 128 (1993) 1047
Zhang, L., J.Z. Liu, M.D. Lan, P. Klavins and R.N. Shelton, Crystal growth and superconductivity of $Bi_{1.7}Pb_{0.3}Sr_2CaCu_2O_8$ 128 (1993) 734
Zhang, Y.L., see Li 128 (1993) 1092
Zheng Chongzhong, see Luo 128 (1993) 963
Zheng Man-na, see Wang 128 (1993) 744
Zhou, J., M. Larrousse, W.R. Wilcox and L.L. Regel, Directional solidification with ACRT 128 (1993) 173
Zhou, W., see Su 128 (1993) 627
Zhou, Yaohe, see Huang 128 (1993) 167
Zhu, Hongbi, see Hu 128 (1993) 991
Zimmermann, H., R. Boyn, C. Albers, K.W. Benz, D. Sinerius, C. Eiche, B.K. Meyer and D.M. Hoffmann, State and distribution of point defects in doped and undoped Bridgman-grown CdTe single crystals 128 (1993) 593
Zlatkowski, M., see Pines 128 (1993) 247

Journal of Crystal Growth 128 (1993) 1311–1318
North-Holland

JOURNAL OF CRYSTAL GROWTH

# Subject index

Alkali
– halides 240, 1059
Alkane crystals 69, 97, 1176
Alloys
– of aluminum, quasicrystals 1086
– of rare earths 1172
Alumina 824
Aluminum
– beryllium boride 1113
– gallium antimonide 466, 470, 475
– gallium arsenide 527, 533, 543
– gallium nitride 379
– lithium boride 1113
– magnesium boride 1113
– nitride 375
– organic 375, 379, 494
– phosphate 125
Ammonium
– nitrate 229
Antimony
– organic 503, 511
Apparatus
– for melt growth
– – by Bridgman–Stockbarger method
– – – of benzil 891
– – by Czochralski method
– – – of benzil 891
– – – of silicon 275
– – – of yttrium barium cuprate 747
– – – simulation model of 275
– – – with solute feeding
– – – – of gallium antimonide 462
– – by Kyropoulos method
– – – of indium phosphide 451
– – by uniaxial solidification
– – – of halides 240
– – – in cold container
– – – – of zirconia, cubic 1193
– – by top seeded solution growth
– – – of lanthanum cuprates 813
– for solution growth
– – by electrochemical reaction
– – – of barium potassium bismuthate 798, 804
– – by flux method
– – – of bismuth strontium calcium cuprate, lead substituted 734
– – by low temperature method
– – – of cyclopropane hydrate 1182
– – – of lead chloride 1282
– – – through thermal gradient
– – – – of proteins 1225
– for thin film growth
– – by hot filament chemical vapor deposition
– – – of diamond 413
– – by liquid phase electroepitaxy
– – – of aluminum gallium antimonide 466
– – – of gallium antimonide 466
– – by modified yo-yo solute feeding method
– – – of gallium indium phosphide 479
– – by molecular beam epitaxy
– – – of yttrium barium cuprate 793
– – by vapor phase epitaxy
– – – through magnetron sputtering
– – – – of niobium oxides 1166
– – – through metalorganic chemical vapor deposition
– – – – of ceria 788
– – – – of magnesium oxide 788
– – – – of yttrium barium cuprate 781
– for vapor growth
– – by magnetron sputtering
– – – of niobium 262
– for miscellaneous purposes
– – diameter control of Czochralski crystals 15
– – investigation of microscopic condensation process within sputtering apparatus 262
– – observation of defects in silicon crystals 304
– – observation of uniaxial solidification 167
– – measuring of ice–glass interface 1131
– – measuring variable temperature in situ 1263
– – supercritical crystallization 50
Argon 57
Arsenic
– organic 503

Barium
– borate, $\beta$ 938, 945
– iron cobalt tin oxide 1273
– organic 777, 781
– potassium bismuthate 798, 804
Benzil 891
Benzoic acid 50
Berlinite 1250
Bismuth
– germanate 852
– oxychloride 1081
– oxyiodide 1081

- selenoiodide 1081
- silicate 834. 852, 871
- strontium calcium cuprates 719, 725, 729, 738
- tellurium molybdate 876
Burton–Cabrera–Frank theory
- of step fluctuation 87

Cadmium
- manganese telluride 588
- mercury telluride 543, 599, 604
- organic 613, 639
- selenide 622, 639
- telluride 571, 576, 582, 593, 609, 613, 617
- zinc selenide 639
Calcium
- chlorofluoride 1031
- neodymium aluminate 694
- neodymium aluminosilicate 986
- (niobium gallium) gallium garnet 1021
- stearate 113
Cellular growth
- of binary (model) alloy 167
- of halides 240
- of salol 178
- of supercooled melt 247
- theoretical aspects 1
Ceria 788
Cesium
- cobalt iron fluoride 1078
- iodide 1059
- manganese iron fluoride 1078
- titanyl arsenate 963
- zinc iron fluoride 1078
Characterization methods
- by absorption spectroscopy 871, 880, 920, 986, 996, 1001, 1011, 1016, 1021
- by atomic force microscopy 403, 408, 650, 704, 762, 781
- by Auger electron spectroscopy 375
- by cathodoluminescence 479
- by deep level transient spectroscopy 475
- by defect density 550
- by differential scanning calorimetry 694, 867, 1047
- by differential thermal analysis 704, 738, 751, 767, 876, 933, 1036, 1172
- by electrical methods 314, 331, 343, 358, 457, 466, 470, 475, 511, 567, 604, 613, 627, 655, 659, 668, 714, 719, 725, 729, 734, 738, 767, 777, 781, 798, 880, 1109, 1197
- by electroluminescence 343
- by electron diffraction 343
- by electron microscopy 74, 113, 267, 271, 327, 331, 363, 379, 413, 418, 599, 617, 633, 639, 646, 676, 650, 659, 725, 729, 734, 738, 757, 762, 767, 777, 781, 788, 808, 891, 956, 1086, 1095, 1099, 1104, 1109, 1113, 1120, 1125, 1150, 1166, 1197, 1212, 1218, 1257, 1288
- by electron probe microanalysis 479, 738, 767, 920, 991, 1025
- by ellipsometry 817, 1137
- by ferroelectricity 909, 963
- by fluorescence 527, 533, 842, 966, 986, 1001, 1031
- by Fourier transform infrared 293, 933, 1150
- by gamma ray technique 846, 1040
- by high performance liquid chromatography 1203, 1212
- by inductively coupled plasma spectrometry 1113
- by infrared transmission 451, 582, 588, 627, 834, 876, 920, 924, 976, 1053, 1059, 1078, 1282
- by light scattering 1182, 1203, 1232
- by magnetic properties 744, 751, 777, 781, 798, 804, 808, 859
- by magnetostriction 1092
- by microhardness 1113, 1120
- by Mössbauer spectroscopy 1078
- by nuclear magnetic resonance 1212
- by optical microscopy 229, 331, 338, 384, 408, 425, 429, 439, 451, 462, 511, 521, 550, 557, 562, 576, 613, 646, 668, 680, 689, 699, 709, 757, 762, 813, 824, 859, 867, 880, 891, 920, 924, 938, 950, 956, 970, 976, 981, 991, 1031, 1053, 1095, 1109, 1197, 1282
- by optical properties 864, 876, 886, 903, 909, 950, 986, 1137
- by optically detected cyclotron resonance spectrum 567
- by particle size distribution analysis 262, 1182, 1232, 1277
- by photoluminescence 384, 391, 462, 475, 479, 521, 567, 593, 622, 639, 646, 650, 1125
- by Raman spectroscopy 403, 413, 418, 842, 933
- by reflectance 876
- by reflection high energy electron diffraction 319, 369, 384, 391, 408, 521, 538, 633, 793
- by Rutherford backscattering 408, 714, 817, 1125
- by second harmonic generation 864, 909, 915, 963, 976, 981
- by specific heat measurements 846
- by thermoelectrical measurements 571
- by thermogravimetry 738, 751, 767
- by X-ray methods 183, 331, 363, 384, 391, 418, 429, 521, 543, 562, 576, 588, 617, 622, 627, 633, 639, 655, 659, 672, 680, 684, 694, 699, 704, 709, 714, 719, 725, 729, 734, 738, 751, 676, 772, 781, 788, 808, 829, 859, 876, 909, 929, 933, 963, 966, 981, 991, 1011, 1021, 1025, 1031, 1036, 1053, 1069, 1078, 1086, 1104, 1109, 1113, 1120, 1125, 1150, 1166, 1176, 1197, 1212, 1218, 1257, 1263
Clusters
- of noncritical liquid 1157
- of silica 1162
Computer simulation
- of defect growth 104
- of diffusion field 163
- of garnet growth 188
- of monitoring temperature distribution 435
- of nucleation 44
Constitutional supercooling
- theoretical aspects 1
Convection 26, 159, 167, 173, 178, 183, 188, 195, 201, 207, 213, 219, 267, 288, 310, 557, 834, 1006, 1062
Copper
- bromide 1069
- indium diselenide 655, 659
- iodide 1069

– mercury iodide 1069
– organic 777, 781
– oxides 267, 714
– sulphate pentahydrate 1277
Cyclooctylamino nitropyridine 886
Cyclopropane hydrate 1182

Dendritic growth
– of ammonium nitrate 229
– of binary (model) alloy 167
– of halides 240
– of ice 234, 251
– of lead 258
– of silica 1162
– of supercooled melt 247
– theoretical aspects 1, 82, 224
– with external flow 219
Device characterization
– diodes 986
– double heterostructures 527, 533
– infrared detector 543
– lasers 966, 986, 991, 996, 1016, 1021, 1036
– light emitting diodes 379, 527, 533
– optical applications 1059
– photovoltaic performance 314
– quantum wells 567, 650
– scintillators 1001, 1059
– solar cells 314
– transistors 358, 543
– wave guides 966
Diamond 397, 403, 408, 413, 418, 425
Diffusional control
– of dendritic growth 224, 251
– of peritectic reaction 757
– of III–V compounds 37
– of virus 1232
– theoretical aspects 82, 92, 163
Diodes, see Device characterization
Dysprosium
– aluminate 672, 689

Epitaxy, see Thin film growth
Etching
– chemical 358, 444, 451, 470, 483, 521, 646, 817, 991, 1031, 1099
– electrochemical 183
Europium
– oxide 846

Ferrites 1273
Finite element model
– for crystals grown by edge-defined film-fed growth 152
Forsterite 991, 996
Fractals 1143, 1162

Gadolinium
– gallium garnet 188
– indium gallium garnet 1011
– oxyorthosilicate 1001
Gallium
– antimonide 457, 462, 466
– arsenide 37, 435, 439, 444, 483, 488, 521, 538, 550
– indium arsenide phosphide 488
– indium phosphide 479
– nitride 379, 384, 391
– organic 379
– phosphide 37, 538, 557
Garnets 74, 188, 966, 1006, 1011, 1021
Germanium 201, 319, 327, 543, 1197
– silicon 1197
Gold 1104

Heat flow control
– of bismuth silicate 834
– of gallium arsenide 435, 444
– of garnet growth 188
– of ice 1130
– of indium phosphide 444
– of lead tin telluride 609
– inside Bridgman furnace 1187
– theoretical aspects 1, 144, 152, 173, 213
Hydrodynamics, see Convection

Ice, 234, 251, 1137, 1143
Impurity
– affecting crystal growth 1236
Indium
– aluminum arsenide 543
– antimonide 173, 201, 511
– arsenide 538
– gallium antimonide 159
– gallium arsenide 543, 562, 567
– organic 503, 511
– phosphide 444, 451, 488, 516, 538

Kinetics
– of growth 1, 37, 97, 104, 113, 127, 159, 229, 310, 343, 349, 354, 369, 466, 516, 557, 613, 622, 639, 777, 829, 970, 1040, 1062, 1130, 1182, 1212, 1232, 1236, 1250, 1268
– of interface control 1, 37, 62, 82, 97, 104, 163, 224, 251, 650, 852
– of nucleation 37, 104, 139, 262, 408, 1212, 1232

Lanthanum
– aluminate 672, 684
– cuprate, pure and doped 813
Lasers, see Device characterization
Lead 258
– bromide 1062
– chloride 1282
– halides 240
– tin telluride 183, 609
– titanate 867
Light emitting diodes, see Device characterization

Lithium
– borate 924, 933
– cuprate 808
– niobate 903, 909, 915, 920, 929
– strontium, aluminum chromium, fluoride 1036
– zinc phospide 1125
Luthetium
– oxyorthosilicate 1001
Lysozyme 1203, 1225

Magnesium
– niobates 842
– oxide 271, 788
– silicate 991, 996
Melt growth technique
– by Bridgman–Stockbarger method
– – of benzil 891
– – of bismuth silicate 834
– – of bismuth strontium calcium cuprate 725
– – of cadmium telluride 571, 576, 582, 593
– – of copper indium diselenide 655
– – of electrochemical mass transfer 173
– – of gallium arsenide 435
– – of indium antimonide 173
– – of lead bromide 1062
– – of lithium borate 924
– – of nitroaniline 981
– – of nitroaniline–chloronitroaniline 976
– – of quasicrystals 1086
– – of silver gallium disulphide 664
– – theory of 1187
– by Czochralski method
– – of alkali halides 1059
– – of barium borate, $\beta$ 938
– – of benzil 891
– – of bismuth germanate 852
– – of bismuth silicate 852, 871
– – of calcium neodymium aluminate 694, 986
– – of calcium (niobium gallium) gallium garnet 1021
– – of cyclooctylamino nitropyridine 886
– – of dysprosium aluminate 689
– – of gallium antimonide 457, 462
– – of gallium arsenide 439
– – of garnets 74, 188
– – of lanthanum aluminate 684
– – of lithium niobate 903
– – of lithium strontium aluminum chromium fluoride 1036
– – of magnesium silicate 991, 996
– – of neodymium aluminate 668
– – of neodymium gallate 704
– – of potassium sodium strontium barium niobate 880
– – of praseodymium gallate 704
– – of rare earth oxyorthosilicates 1001
– – of silicon 275, 288, 293
– – of simulated oxide growth 195
– – of strontium gadolinium gallate 1016
– – of strontium lanthanum aluminate 694
– – of strontium neodymium aluminate 986
– – of (terbium dysprosium) iron 1092
– – of yttrium barium cuprate 747
– – theory of 15
– by double crucible Czochralski method
– – of lithium niobate 909, 915
– by edge-defined film-fed growth
– – of rutile 829
– – of silicon 298, 338
– by floating zone method
– – of gadolinium indium gallium garnet 1011
– – of neodymium aluminate 680
– – of silicon 282
– – of silicon germanium 331
– by gradient solidification method
– – of lead bromide 1062
– – of sapphire 824
– by Kyropoulos method
– – of indium phosphide 451
– by laser heated pedestal growth
– – of magnesium niobates 842
– – of yttrium orthovanadate 1025
– by skull melting/recrystallization
– – of cubic zirconia 13
– by slow cooling
– – of bismuth tellurium molybdate 876
– by submerged heater method
– – of germanium 201
– – of indium antimonide 201
– by top seeded solution growth
– – of lanthanum cuprates 813
– – of lithium borate 933
– – of neodymium cuprates 817
– – of potassium niobate 897
– – of potassium tantalate niobate 897
– – of potassium titanyl phosphate 950
– – of praseodymium cuprates 817
– by traveling heater method
– – of aluminum gallium antimonide 470, 475
– – of mercury cadmium telluride 599, 604
– – of zinc telluride 627
– by uniaxial solidification
– – of binary (model) alloy 167
– – of europium oxide 846
– – of lead halides 240
– – of lead tin telluride 183
– – of lithium niobate 903
– – of salol 178
– – of zirconia, cubic 1193
– by vertical gradient freeze
– – of cadmium manganese telluride 588
– – of gallium arsenide 444
– – of germanium 213
– – of indium phosphide 444
– – of rare earth aluminates 672
– by zone melting
– – of lithium niobate 920

– – of lithium strontium aluminum chromium fluoride 1036
– – of mercury (II) iodide, $\alpha$ 1047
– – of yttrium barium cuprate 757
– theory of 1, 26, 144, 152, 1006
Mercury
– cadmium telluride 543, 599, 604
– (I) bromide 1053
– (I) chloride 1053
– (I) iodide 1053
– (II) iodide, $\alpha$ 1040, 1047
Methyl-benzylamino-nitropyridine 970
Microgravity, growth under
– of low convection solidification 207
– of proteins 1225
Molecular dynamics
– of barium borate, $\beta$ 945
Molecular orbital study
– on reaction of aluminum precursor 494
Molecular sieves 1150
Monte Carlo simulation
– of clusters of silica 1162
– of growth in diffusion fields 82, 87
– of Lennard-Jones crystals 57, 62
– of phase transformation 127
– of surface step migration 499
Morphological stability
– of dendritic growth 224, 251
– of supercooled melt 247
– of III–V compounds 37, 557
– of vitamin C 1212
– theoretical aspects of 1, 62, 82, 87, 92, 163, 167
Morphology of growth
– of berlinite 1250
– of copper sulphate pentahydrate 1277
– of diamonds 425
– of halides 240
– of ice 251
– of lead chloride 1282
– of mercury (II) iodide 1040
– of molecular liquids 116
– of sodium perborate 1268
– theoretical aspects of 1, 82, 97, 104

Neodymium
– aluminate 668, 672
– cuprates 817
– praseodymium gallate 699
Niobium 262
– oxides 1166
Nitroaniline 981
– chloronitroaniline 976
Nonlinear optics, crystals for
– cesium titanyl arsenate 963
– lithium niobate 903, 909, 915
– methyl-benzylamino-nitropyridine 970
– nitroaniline 981
– nitroaniline–chloronitroaniline 976
– potassium titanyl arsenate 963
– potassium titanyl phosphate 950
– rubidium titanyl arsenate 864
Northriptyline hydrochloride 1218
Nucleation
– computer simulation 44, 104
– of benzoic acid 50
– of phenanthrene 50
– of proteins 1225, 1232
– of silica molecular sieves 1150
– of virus 1232
– of vitamin C 1212
Numbers
– Grashof 188, 195
– Marangoni 195
– Peclet 82
– Prandtl 219
– Rayleigh 201
– Reynolds 188
– Rossby 288
– Taylor 288

Oleic acid 1263

Phase diagrams
– of barium/copper/oxygen system 767
– of cadmium/tellurium system 582
– of lithium oxide/boron oxide 933
– of rare earth alloys 1172
– of sodium boron barium iron oxides/cobalt stannite 1273
– of sodium fluoride/magnesium fluoride 709
– of water/sugars 1245
– of yttrium/barium/copper/oxygen system 751
– of yttrium/boron system 429
– of yttrium oxide/vanadium (III) oxide/vanadium (V) oxide 1025
Phenanthrene 50
Phenomenological theory
– of binary systems, non-critical 139
– of epitaxial misorientation 122
– of growth with no contact between crystal and ampoule wall 609
– of shape of crystals 1
– of silicon carbide 354
Phosphorus
– organic 503
Phthalocyanine 1257
Potassium
– chloride 1059
– niobate 897
– sodium strontium barium niobate 880
– tantalate niobate 897
– titanyl arsenate 956, 963
– titanyl phosphate 950
Praseodymium
– cuprates 817
Precursor
– for antimony 503

– for arsenic 503
– for indium 503
– for phosphorus 503
Proteins 1203, 1225, 1232
Purification of materials
– of mercury (I) halides 1053
– of mercury (II) iodide, $\alpha$ 1047
– of vitamin C 1212

Quantum wells, see Device characterization
Quasicrystals 1086

Rare earth
– alloys 1172
Rubidium
– titanyl arsenate 864
Rutile 829

Salol 178
Sapphire 824
Selenium
– organic 639, 650
Silicate
– minerals 397
Silicon 275, 282, 288, 293, 298, 304, 310, 314, 338, 1197
– carbide 338, 343, 349, 358, 363, 369, 375
– germanium 331
Silver 1104
– gallium disulphide 664
– mercury iodide 1069
– tantalum selenoiodide 1109
Sodium
– iodide 1059
– magnesium fluoride 709
– perborate 1268
Solar cells, see Device characterization
Solid growth technique
– by oxidation
– – of magnesium oxide 271
– by polymorphic transformation
– – of oleic acid 1263
– by recrystallization
– – of aluminum alkaline earth borides 1113
– – of silver tantalum selenoiodide 1109
– by supercritical crystallization
– – of organic crystals 50
Solution growth technique
– by electrochemical reaction
– – of barium potassium bismuthate 798, 804
– by electrodeless reduction
– – under applied magnetic field
– – – of lead 258
– by flux method
– – of barium iron cobalt tin oxides 1273
– – of bismuth strontium calcium cuprate 734, 738
– – of calcium chlorofluoride 1031
– – of cesium cobalt iron fluoride 1078
– – of cesium manganese iron fluoride 1078
– – of cesium zinc iron fluoride 1078
– – of diamonds 425
– – of garnets 74
– – of lead titanate 867
– – of lithium cuprate 808
– – of neodymium praseodymium gallate 699
– – of rubidium titanyl arsenate 864
– – of tantalum borides 1120
– – of yttrium barium cuprate 744, 751, 762
– – of yttrium praseodymium barium cuprate 767
– by gel method
– – of copper (I) halides 1069
– – of copper mercury iodide 1069
– – of silica 1162
– – of silver mercury halide 1069
– – of zeolite 1288
– by hydrothermal growth
– – of berlinite 1250
– – of bismuth silicate 871
– – of potassium titanyl arsenate 956
– – of silica molecular sieves 1150
– by low temperature method
– – of alkanes 1176
– – of copper sulphate pentahydrate 1277
– – of cyclopropane hydrate 1182
– – of gold 1104
– – of lead chloride 1282
– – of methyl-benzylamino-nitropyridine 970
– – of northriptyline hydrochloride 1218
– – of phthalocyanine 1257
– – of proteins 1203, 1225, 1232
– – of sodium perborate 1268
– – of virus 1232
– – of vitamin C 1212
– theory of 1
Spinels 859
Statistical mechanics, molecular theory
– of binary systems, non-critical 139
– of growth in diffusion field 87
– of Lennard-Jones crystals 57, 62
– of molecular liquids 116
– of phase transformation 127
– of roughening transition 97
Stefan problem or moving boundary problem
– of ice 251, 1130
– of silicon 275
– of supercooled melt 247
– theoretical aspects 1
Step 37, 82, 87, 92, 97, 104
Strontium
– gadolinium gallate 1016
– lanthanum aluminate 694
– neodymium aluminate 986
Sugars 1245
Sulphur
– organic 650

Superconductivity materials, high $T_c$
– bulk
– – of BSCCO 725, 734, 738
– – of YBCO 744, 747, 751, 757
– – of YPrBCO 767
– film
– – of BSCCO 729
– – of YBCO 751, 772, 777, 781, 793
– whisker
– – of BSCCO 719
Superconductivity materials, low $T_c$
– bulk
– – of barium potassium bismuthate 798, 804
Supercooling, supersaturation 1, 97, 571, 729, 886, 1096, 1212, 1218, 1282
Superlattices, multilayers
– of germanium silicon 543
– of III–V compounds 543
– of II–VI compounds 622, 650
Surface energy, determination
– of alkane crystals 97
– of ice 1143
– of protein 1232
– of virus 1232
Surface structure
– of ice in pores 1143
– of molecular liquids 116
– of quasi-liquid layer 1137

Tantalum
– borides 1120
Tellurium
– organic 613, 633
Terbium
– dysprosium iron 1092
Thermodynamics
– of alkane crystals 69, 97
– of binary systems, non-critical 139
– of cluster formation, non-critical liquid 1157
– of hydride precursor 488
– of ice in pores 1143
– of phase transformations 127
– of spinel 859
– of tetramethyl silane pyrolysis 349
– of water–sugar systems 1245
Thin film growth, epitaxy
– by laser ablation
– – of copper (I) oxide 714
– – of lithium niobate 929
– – of yttrium barium cuprate 704, 772
– by liquid phase electroepitaxy
– – of aluminum gallium antimonide 466
– – of gallium antimonide 466
– – of indium gallium arsenide 562
– by liquid phase epitaxy
– – of aluminum gallium arsenide 527, 533
– – of bismuth strontium calcium cuprate 729
– – of gallium phosphide 557
– – of germanium 327
– – of indium gallium antimonide 159
– – of nitroaniline 981
– – of potassium niobate 897
– – of potassium tantalate niobate 897
– – of silicon 310, 314
– – of silicon carbide 343
– – of silicon germanium 331
– – of yttrium aluminum garnet 966
– – of yttrium barium cuprate 751
– – theory of 37
– by molecular beam epitaxy
– – of aluminum gallium arsenide 543
– – of cadmium selenide 622
– – of gallium arsenide 488, 521, 538, 550
– – of gallium phosphide 538
– – of germanium 319, 543
– – of indium aluminum arsenide 543
– – of indium arsenide 538
– – of indium gallium arsenide 543
– – of indium gallium arsenide phosphide 488
– – of indium phosphide 488, 538
– – of mercury cadmium telluride 543
– – of yttrium barium cuprate 793
– – of zinc selenide 622
– – of zinc sulphide 622
– – theory of 37, 622
– by sputtering
– – of niobium oxides 1166
– by vapor phase epitaxy
– – through chemical vapor deposition
– – – of cadmium telluride 613, 617
– – – of diamond 403, 408, 413
– – – of gallium arsenide 488
– – – of gallium nitride 384
– – – of indium gallium arsenide phosphide 488
– – – of indium phosphide 488, 516
– – – of silicon carbide 349, 363, 369, 375
– – through evaporation and condensation
– – – of calcium stearate 113
– – – of lithium zinc phosphide 1125
– – – of silver 1104
– – through metalorganic chemical vapor deposition
– – – of aluminum gallium nitride 379
– – – of aluminum nitride 375
– – – of cadmium selenide 639
– – – of cadmium zinc selenide 639
– – – of ceria 788
– – – of gallium nitride 379, 391
– – – of indium antimonide 511
– – – of magnesium oxide 788
– – – of yttrium barium cuprates 777, 781
– – – of zinc telluride 633
– – through metalorganic chemical vapor deposition, electron-assisted
– – – of diamond 418

- by yo-yo solute feeding method
- - of gallium indium phosphide 479
Titanium
- dioxide 829
Twinning
- of cadmium telluride 617
- of gold 1104
- of silver 1104
- of sodium magnesium fluoride 709
- of yttrium barium cuprate 751

Vapor growth technique
- by chemical transport
- - of bismuth oxychloride 1081
- - of bismuth oxyiodide 1081
- - of bismuth selenoiodide 1081
- - of mercury (I) halides 1053
- - of silicon carbide 354
- - of zinc manganese chromite 859
- - of zinc telluride 627
- by evaporation and condensation
- - of cadmium telluride 609
- - of copper indium diselenide 659
- - of lead tin telluride 609
- - of mercury (II) iodide, $\alpha$ 1040
- - of phthalocyanine 1257
- - of silicon carbide 354, 358
- - of zinc selenide 646
- - theory of 609
- by magnetron sputtering
- - of niobium 262
- theory of 82, 251
Vapor–liquid–solid growth
- of zinc oxide 1099
Virus 1232
Vitamin C 1212

Whisker growth
- of bismuth strontium calcium cuprate 719
- of zinc oxide 1095, 1099

Yttrium
- aluminum garnet 966, 1006
- barium cuprate 704, 744, 747, 751, 757, 762, 772, 777, 781, 793
- boride 429
- orthovanadate 1025
- oxyorthosilicate 1001

Zeolite 1288
Zinc
- manganese chromite 859
- organic 633, 639, 650
- oxide 1095, 1099
- selenide 622, 646, 650
- sulphide 622
- telluride 627, 633
Zirconia, cubic 13, 1193
Zirconium
- oxide, cubic 13